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Wiqas Ahmed
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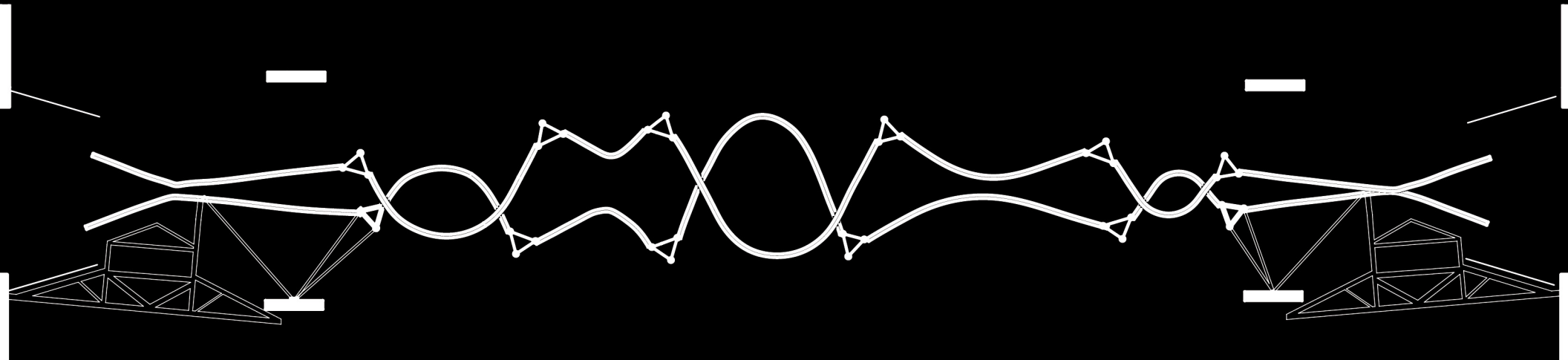


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Discontinuous Continuous Surface

Wiqas Ahmed
Primary: Ted Brown
Secondary: Bruce Coleman
05 . 10 . 13

1. Introduction

- Functional Multiplicity and Disrupted Continuity
- Disrupted Continuous Surface
- Formal Explorations: Disrupted Continuous Surface
- Formal Explorations: Project

2. Time Lapse Photography and Disrupted Continuity

3. Film and Disrupted Continuity

4. Architectural Precedents

- Four Sports Scenarios
- City Culture of Galicia
- Santa Catarina Market
- Yokohama International Port Terminal

5. Empire State Plaza (site)

6. Design Schemes

7. Final Scheme

FUNCTIONAL MULTPLICITY AND DISRUPTED CONTINUITY

“FORM FOLLOWS FUNCTION” or “function follows form” is part of a larger dual thinking that has captivated the western mind for generations. Farshid Moussavi describes this duality in *The Function of Form* as “...opposing views of function and the role of architectural form are typical of a whole range of binary oppositions that dominated the twentieth century: East v. West, Left v. Right, culture v. nature, mind v. matter.”

This bipolar mind set, however, fails to take into account the complexity and multiplicity of our society brought up by trade, globalization, immigration, and conquest. Our cities are no longer singular; they are constantly infiltrated with foreign ideas to create a collection of cultural values, overlaid one on top of another. It is this multiplicity that the twenty-first century architectural form needs to address.

1. Farshid Moussavi, *The Function of Form*, (New York: Actar, 2009), 7-34.
2. Peter Eisenman, *Inside Out*, (London: Yale University Press, 2004), 03-27.

Throughout the twentieth century form has been set in a direct competition with some other architectural aspect. For example, the problem of form v. function, where form competes with function; the problem of form v. form, where form competes with itself and function is ignored; and, with a recent shift towards 'Green Architecture', form is somehow seen in competition with performance or technology.

In order to respond to the needs and demands of the twenty-first century, dual architectural thinking must be abandoned in favor of form & multiplicity. Here form should act as a canopy under which multiple functional aspects including programmatic, performative, cultural, economic, historical, geographic, infrastructural, and climate considerations can coexist simultaneously. Form can no longer be thought of as a counter argument to function, visa versa, but rather as an independent medium in which function operates. Since function is now defined as multiplicity, consequently, form becomes the study of the method of articulating multiple conditions. There may be several ways by which form can act as a tendon between different aspects but the condition I want to explore is of jump cuts and sharp breaks in continuous surface projects.

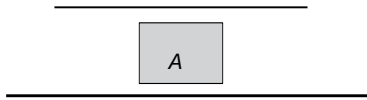
The project looks at time-lapse photography, jump cut, and montage techniques in film and photography to project and define formal qualities of a disrupted surface in architecture. Primarily sectioning will be used as a strategy to explore this new form of surface.

DISRUPTED CONTINUOUS SURFACE

Image Captions:

Figure 1-4: Evolution of continuous surface and its function

Figure 1-4: Author

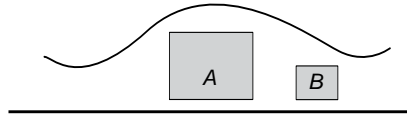


Flat Continuous Surface

The surface (usually roof) simply lays on top of the programmatic elements irrespective of functional variations

A & B: Program

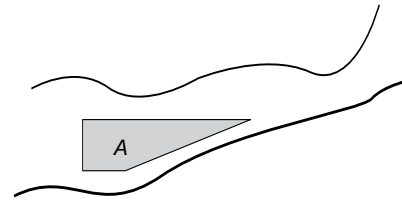
Function: Shelter covering
Figure 1



Lofted Continuous Surface (program)

Responsive to height changes of programmatic elements

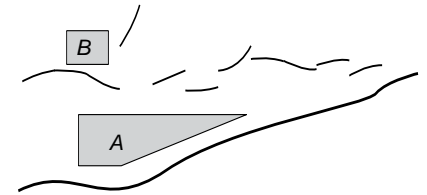
Function: Programmatic
Figure 4



Lofted Continuous Surface (topography)

Surface is designed with topography in mind; the boundaries between roof and ground are blurred

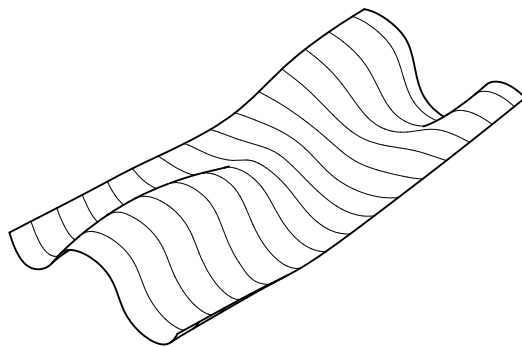
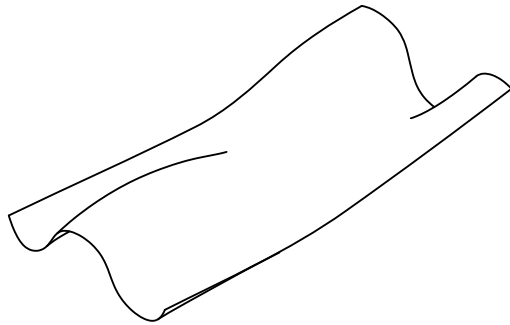
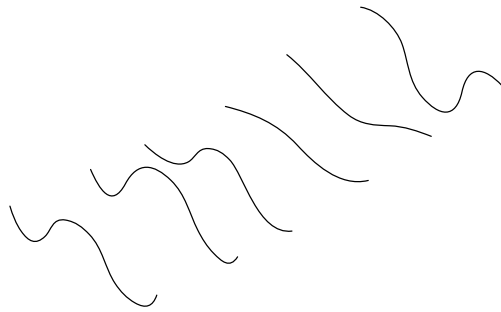
Function: Topographic
Figure 3



Disturbed Continuous Surface (Proposed)

Responsive and able to accommodate *Functional Multiplicity*, which not only includes programmatic and topographic considerations but also pays attention to contextual, sustainable, and technological issues.

Function: Multiplicity
Figure 4



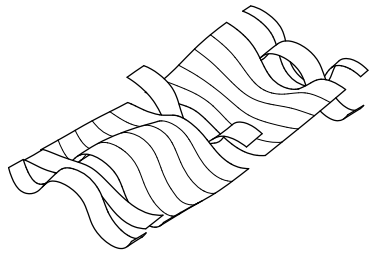
DISRUPTED CONTINUOUS SURFACE: *Formal Explorations*

Continuous surface, whether it is roof, floor, or some hybrid condition in-between, is singular and progressive in nature. In order for architecture to accommodate functional multiplicity, the one dimensional sequential progression must be broken apart and reevaluated. Instead I propose a disrupted continuous surface which retains the coherence of continuity and yet provides flexibility for functional diversity.

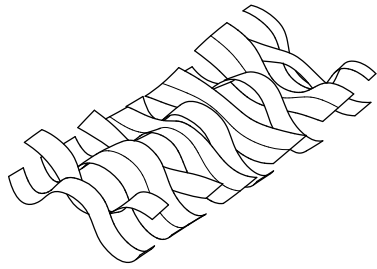
Image Captions:

Figure 1.1-5.4: Formal explorations to see how much can a surface be disrupted and still remain continuous

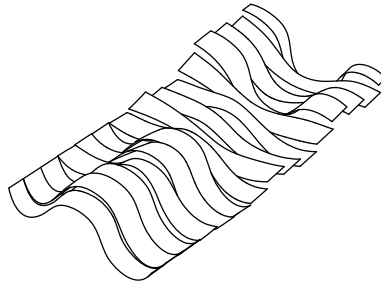
Figure 1.1-5.4: Author



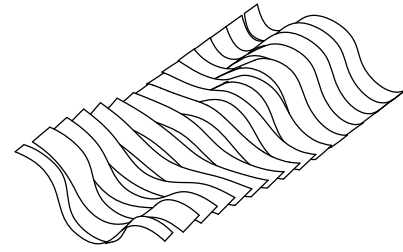
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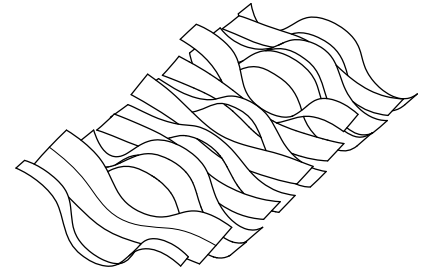
2.1



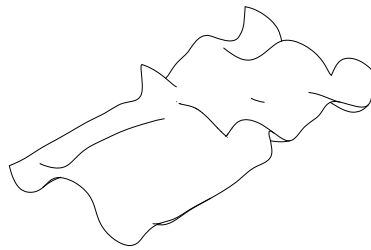
3.1



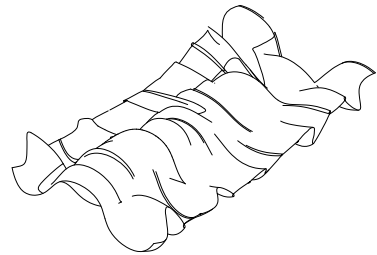
4.1



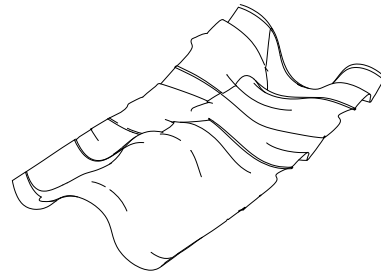
5.1



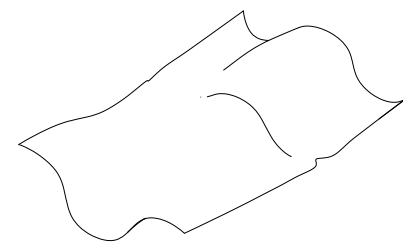
1.2



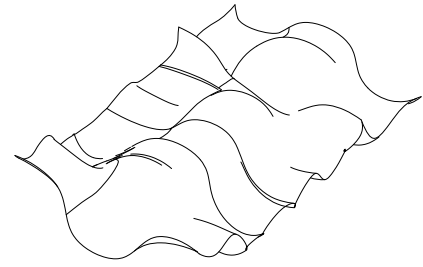
2.2



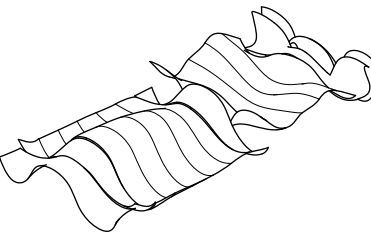
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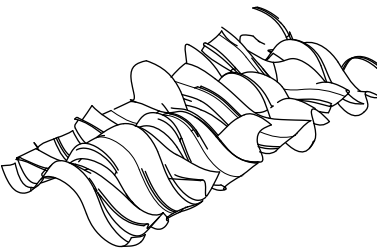
4.2



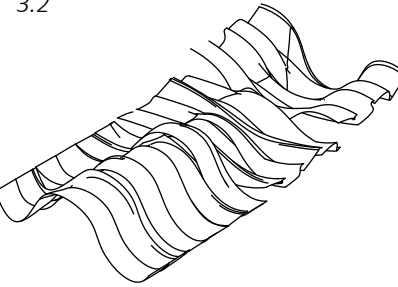
5.2



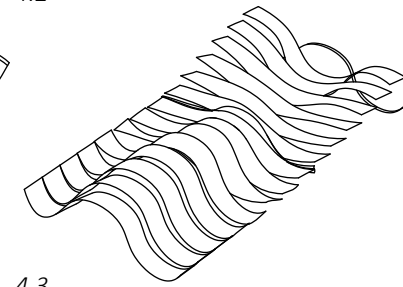
1.3



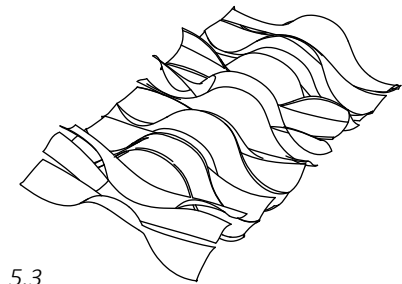
2.3



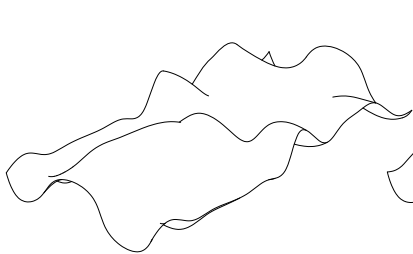
3.3



4.3

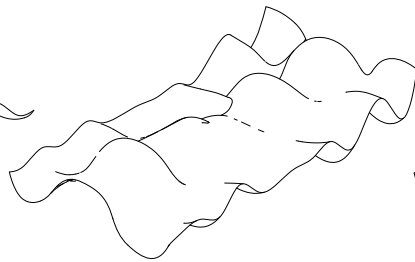


5.3



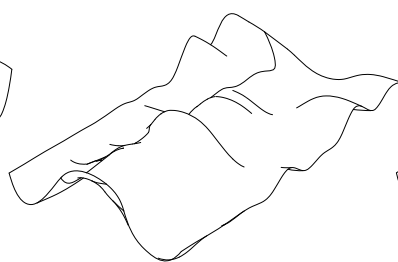
1.4

Every sixth strip is set at random



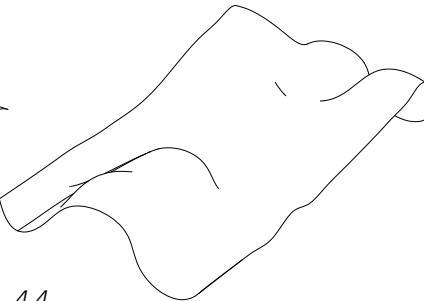
2.4

Every fourth strip is set at random



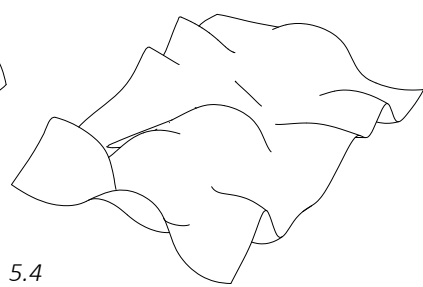
3.4

Every strip is switched with an adjacent strip



4.4

Strips are inverted



5.4

All strips are set at random

DISRUPTED CONTINUOUS SURFACE: *Project*

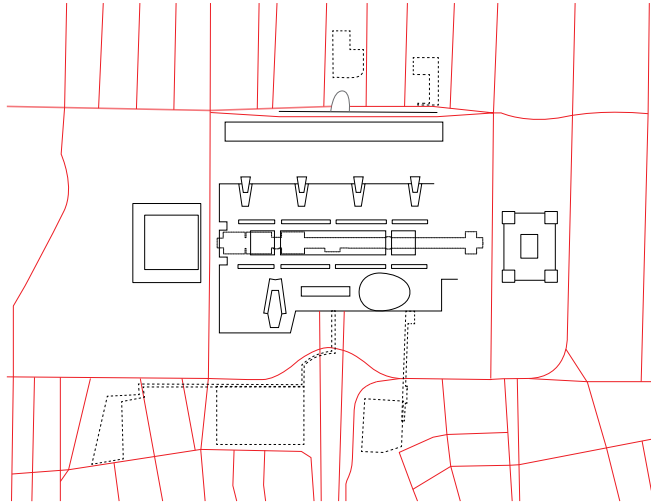
The Empire State Plaza is completely separated from the existing city grid. While the city streets run vertically the plaza is placed horizontally, blocking off most streets. Furthermore the Plaza was built with public taxes so public should be able to access and interact with it much more than what it is now. A true public plaza should accommodate multiplicity and not be selective of types of people (office workers v. public, car v. pedestrian). In order to achieve multiplicity disrupted continuous surface techniques will be introduced (see diagrams).

Image Captions:

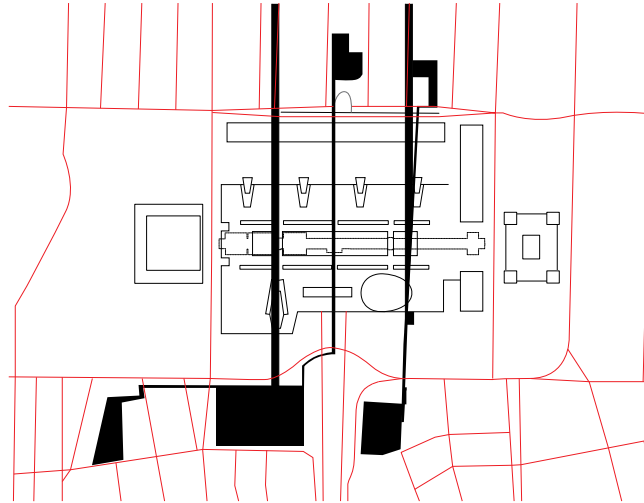
Figure 1.1-1.4: Cutting the Empire State Plaza to create ruptured surface. Series of plan and section diagrams

Figure 1.1-1.3: Author

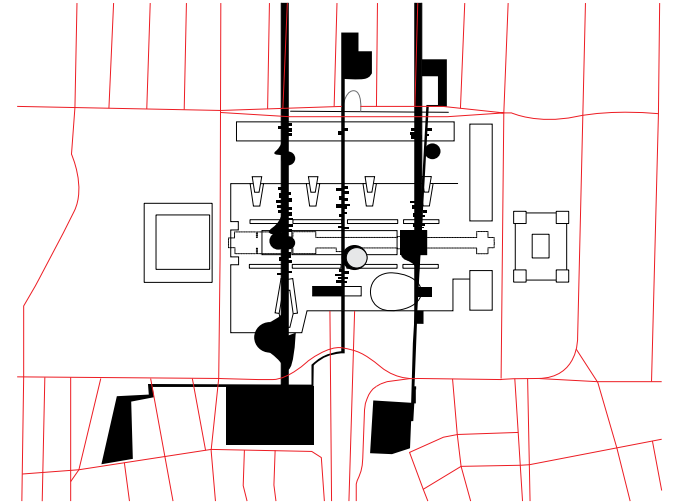
Figure 1.5: Jason So and Author



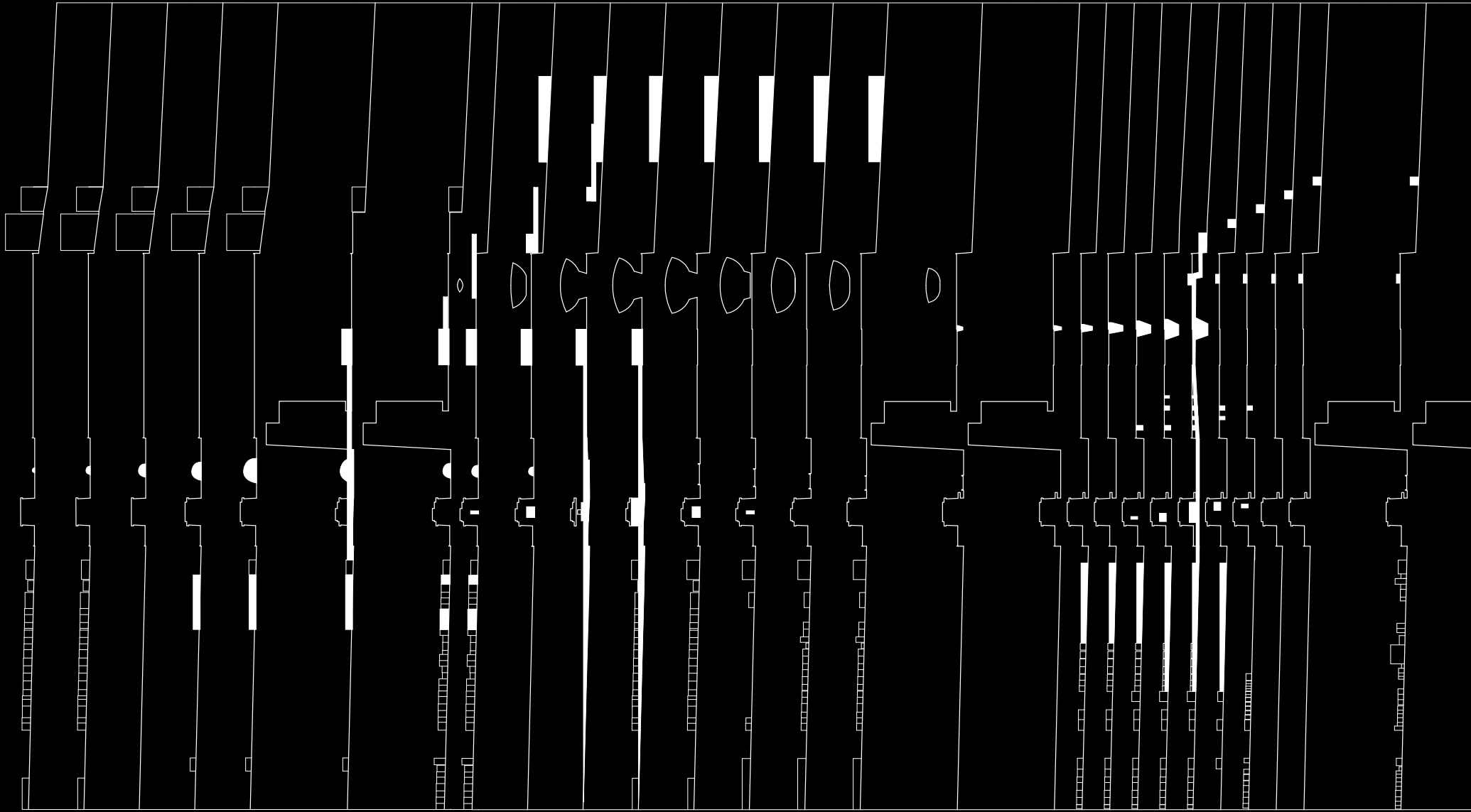
1.1



1.2



1.3



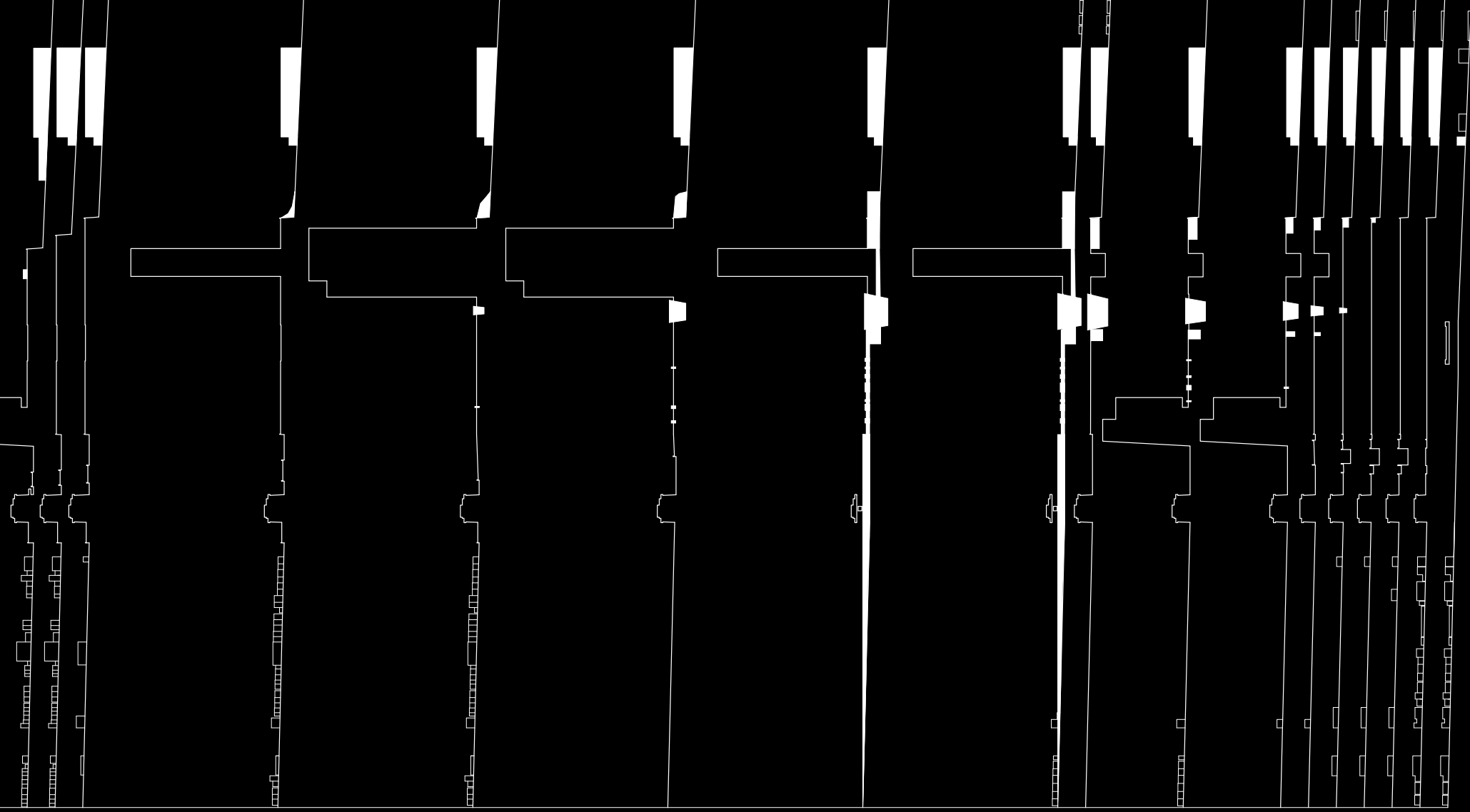


Figure: 1.4

GORDON MATTA-CLARK (1943-1978)

Gordon Matta-Clark carved or cut out sections through buildings most of which were scheduled to be destroyed. He called his interventions “anarchitecture.”¹ This technique provides a good strategy for inserting additional program into the Empire State Plaza.

Image Captions:

Figure 2-3: Photographs of Gordon Matta-Clark’s interventions (“anarchitecture”)

1: Guggenheim, “Collection Online Gordon Matta-Clark.” Accessed November 29, 2012. <http://www.guggenheim.org/new-york/collections/collection-online/>.



Figure 2



Figure 3



Figure 4

TIME LAPSE PHOTOGRAPHY & DISRUPTED CONTINUITY

Pioneers in time lapse photography like Harold E. Edgerton, E. J. Marey, and Eadweard Muybridge tried to capture multiple views of a subject in the same photograph (see figure). In some of their work they tried to change the singular nature of a photograph by adding a factor of time, which introduced possibilities for gaps and multiple experiences within the same continuous

Image Captions:

Figure 1&2: Harold E. Edgerton's photographs showing how there can be gaps within a continuous motion

Figure 3.1-3.4: E.J. Marey's chronographs where he attached tape on a man's arms and legs to create a chart of his motion

1. Harold E. Edgerton, Stopping time: The Photographs of Harold Edgerton, (New York: H.N. Abrams, 1987).

Figure 1: Harold E. Edgerton, Gus Solomons, 1960. gelatin silver print, 52.39cm x 44.61cm. The Minneapolis Institute of Arts, Minneapolis, Minnesota, USA. Available from: ARTstor, <http://www.artstor.org> (accessed October 29, 2012).

Figure 2. Harold E. Edgerton, Back Dive, mid 1960s. unidentified. Available from: <http://edgerton-digital-collections.org/> (accessed October 29, 2012)

Figure 3.1-3.4: Etienne-Jules Marey, Chronophotographs, 1885. Musee Marey, Beaune, France. Available from: ARTstor, <http://www.artstor.org> (accessed October 29, 2012).



Figure 1

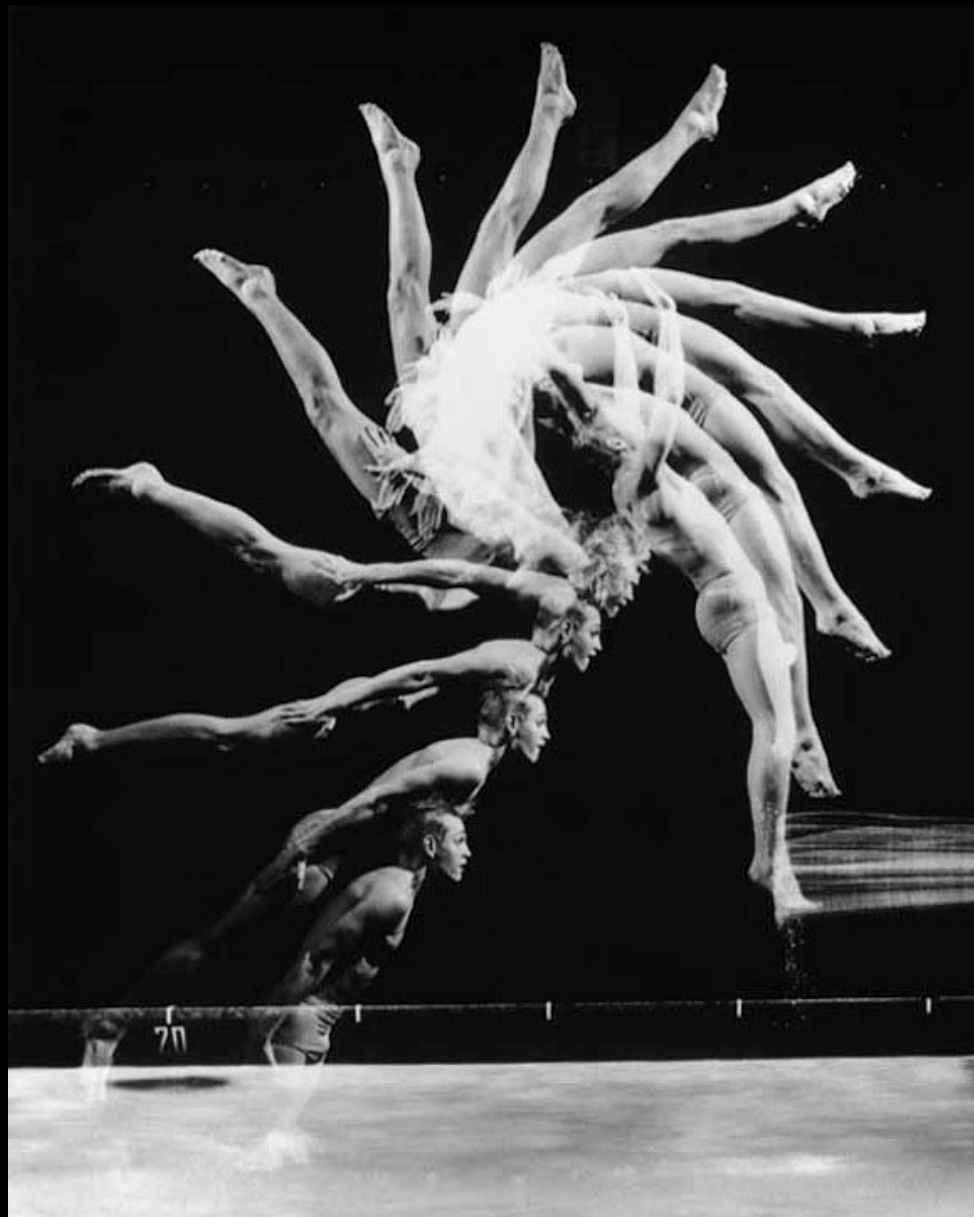


Figure 2

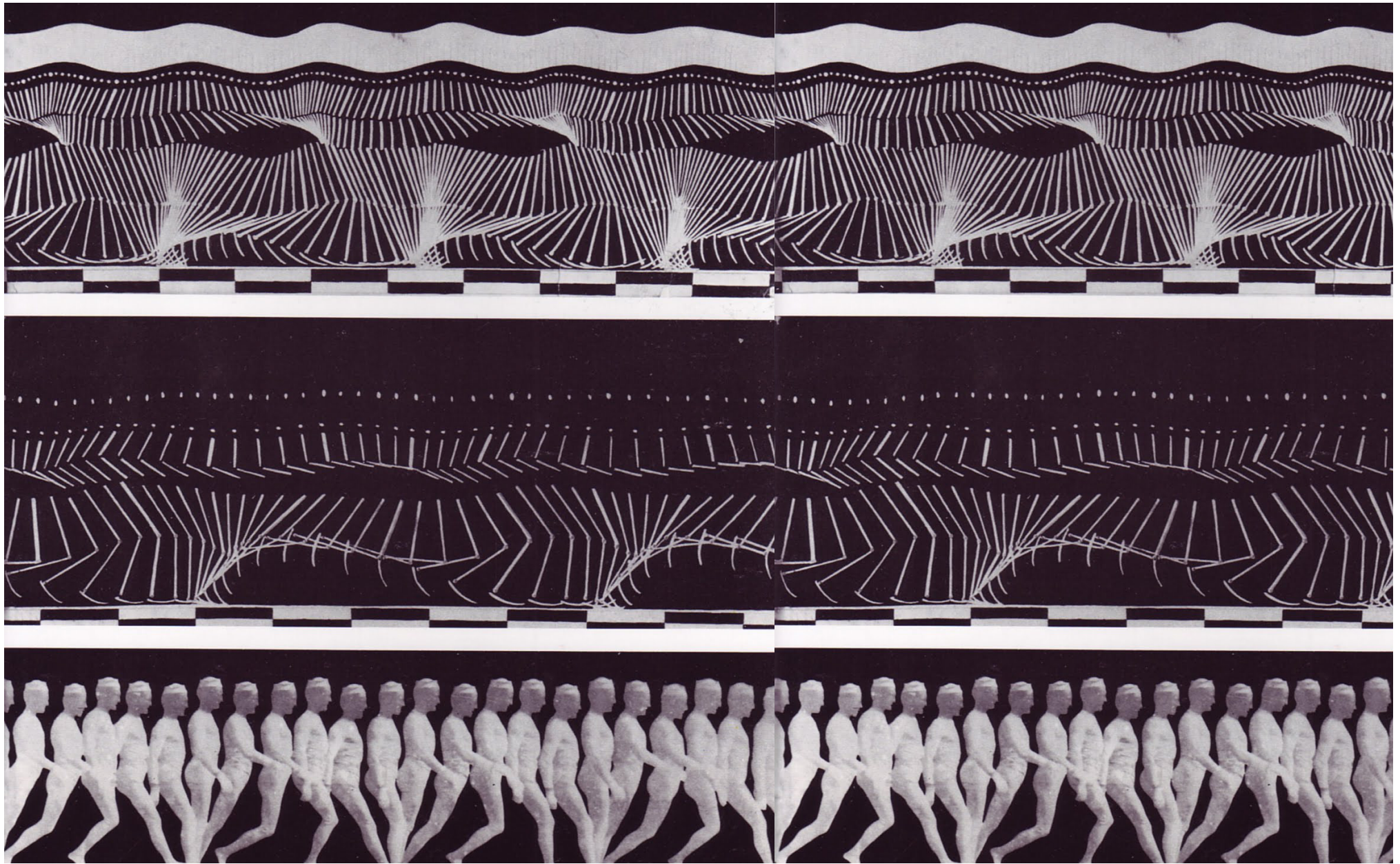


Figure 3.1

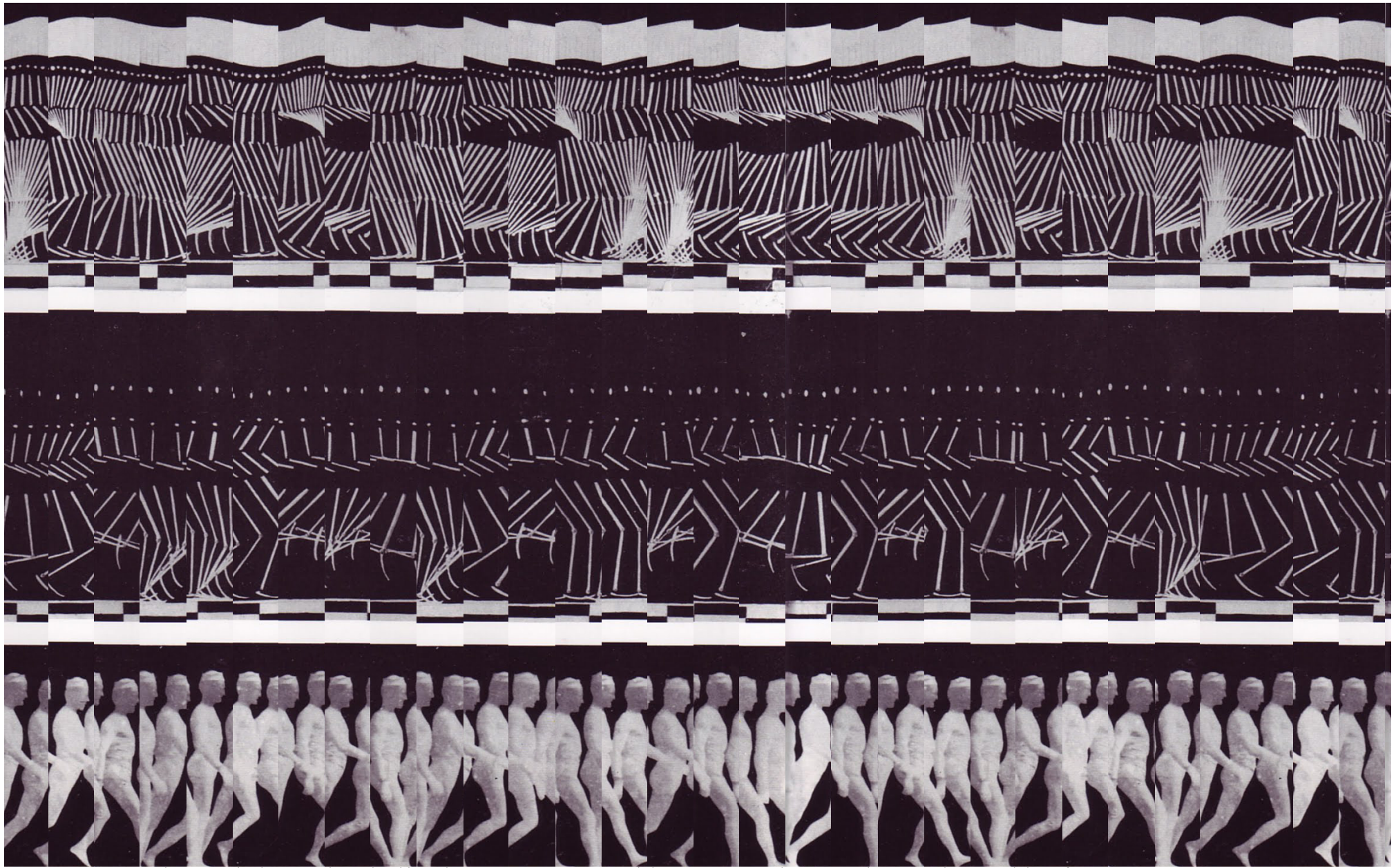


Figure 3.2: Etienne-Jules Marey's photograph is edited by splitting it into segments and then rearranging them at random to explore possibilities for gaps.

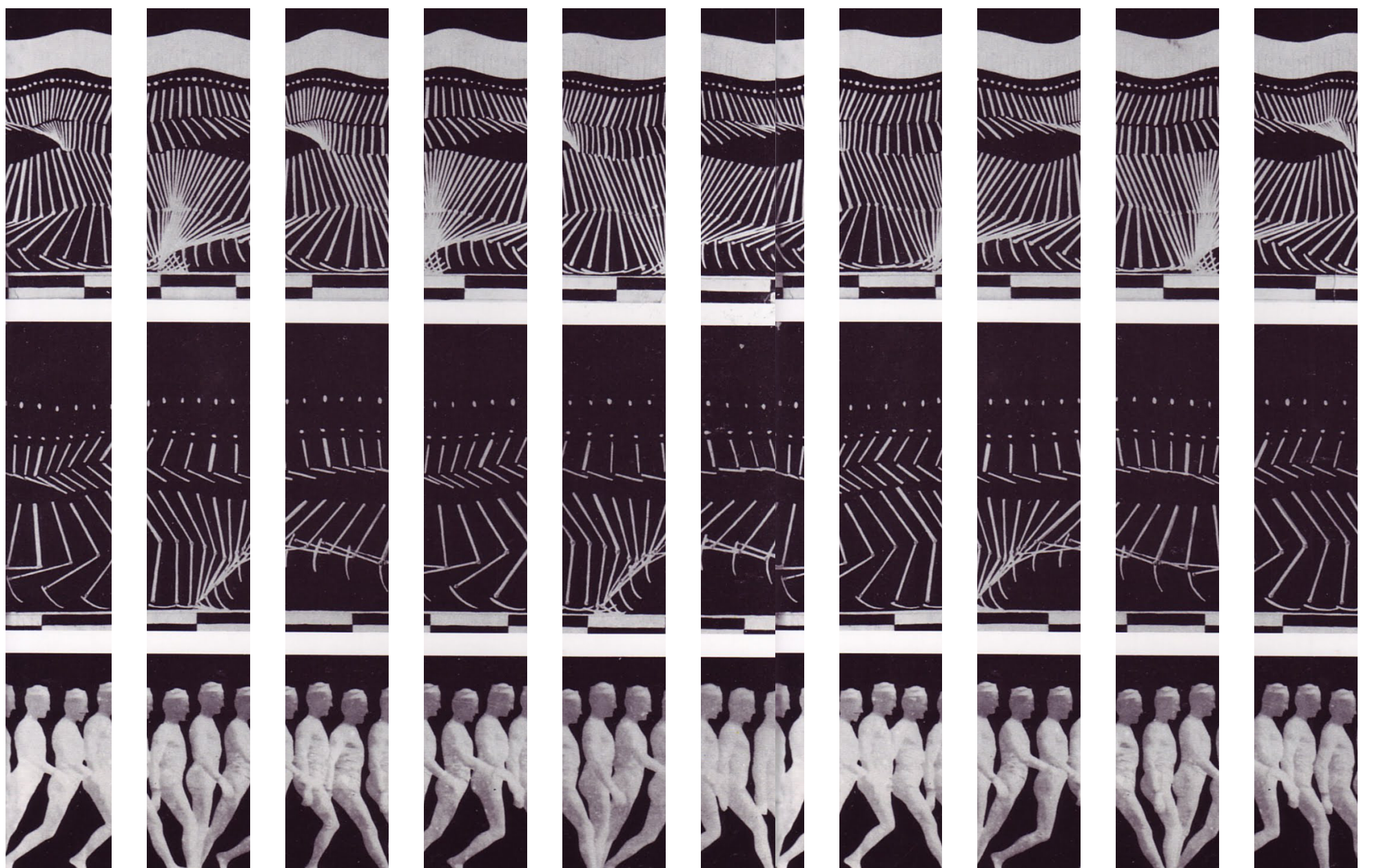


Figure 3.3

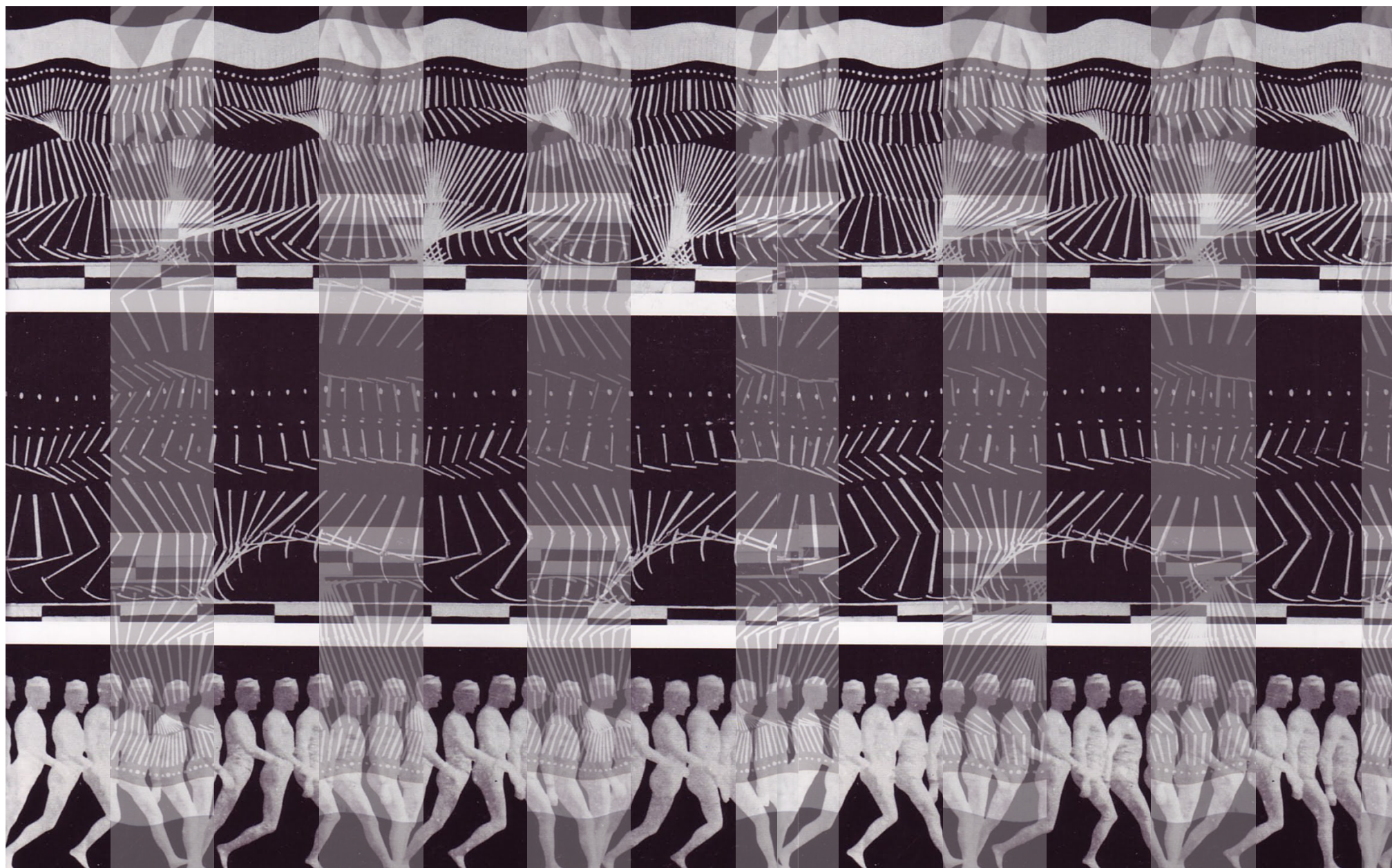


Figure 3.4

FILM AND DISRUPTED CONTINUITY

Continuity as a film term refers to the physical continuousness of one scene to the next. Meaning if a glass is empty in one shot then in the next shot the glass should not be full. This rule is broken however in some cases to introduce new techniques in film such as *jump cuts* and *montages*.¹

Jump cut: a sudden often jarring cut from one shot or scene to another without intervening devices (as *fade-outs*); *broadly*: an abrupt transition (as in a narrative)²

Montage: the production of a rapid succession of images in a motion picture to illustrate an association of ideas³

1. Wikipedia, "Film Editing." Last modified 12.08.12 http://en.wikipedia.org/wiki/Film_editing.

2. 3. Definition from Merriam Webster Dictionary





BREATHLESS (1960)

When Jean-Luc Godard was asked to shorten his 1960 film, *Breathless*, from two and a half hours to one and a half hour, instead of shortening each shot so that the continuity of the scene remained, he cherry picked and cut out entire shots.

“...first films are very long...instead of slightly shortening one [shot] and then slightly shortening the other, and winding up with short little shots of both of them, we’re going to cut out four minutes by eliminating one or the other altogether, and then we will simply join the [remaining] shots, like that, as though it were a single shot.”⁴ - Jean-Luc Godard

Image Captions:

Series 1 (right): Clip from Jean-Luc Godard’s film, Breathless. The clip is 20 second long with five jump cuts

4: Marelga Morgan, ““Breathless” and Godard’s Jump Cuts,” Wordpress (blog), 06 02, 2010, <http://morganmareglia.com/2010/06/02/breathless-and-godards-jump-cuts/>.

Series 1 (right): Godard, Jean-Luc. “A bout de souffle (Breathless).” Recorded 1960. Fox Lorber Films . 2001. DVD





OCTOBER: Ten Days That Shook the World (1928)

Sergei Eisenstein used montage in his 1928 film *October: Ten Days That Shook the World* to show relationship between apparently unconnected things. He described this technique as “intellectual montage.” The film was produced as a tribute to the tenth anniversary of the October Revolution.⁵

Image Captions:

Series 2 (right): Clip from Sergei Eisenstein film, October. The clip is two minutes long and is composed of various smaller clips

5: Wikipedia, "October: Ten Days That Shook the world." Last modified 08.26.12 http://en.wikipedia.org/wiki/October:_Ten_Days_That_Shook_the_World.



ARCHITECTURAL PRECEDENTS

1. Four Sports Scenarios
2. City Culture of Galicia
3. Santa Catarina Market
4. Yokohama International Port Terminal

FOUR SPORTS SCENARIOS

Architects: Giancarlo Mazzanti + Felipe Mesa

Location: Medellin, Colombia

Year: 2010

Photograph: Iwan Baan

“The north and south façades are open to let the major winds pass and the east and west façades have the tribunes and eaves that control the morning and the afternoon sun. In this way we are inside of a single and perpendicular bioclimatic diagram”¹ - Architects

Image Captions:

Figure 1.1: Partial plan drawing of Four Sports Scenarios

Figure 1.2: Longitudinal section showing natural ventilation features (north and south)

Figure 1.3: Cross section showing the blocking of lower sun angles (east and west)

Figure 1.4: Photograph by Iwan Baan showing the extension of the roof strips creating exterior covered space

1. “Four Sport Scenarios / Giancarlo Mazzanti + Felipe Mesa (Plan:b)” 09 Jun 2011. ArchDaily. Accessed 28 Nov 2012. <<http://www.archdaily.com/141675>>



Figure 1.1 (below)

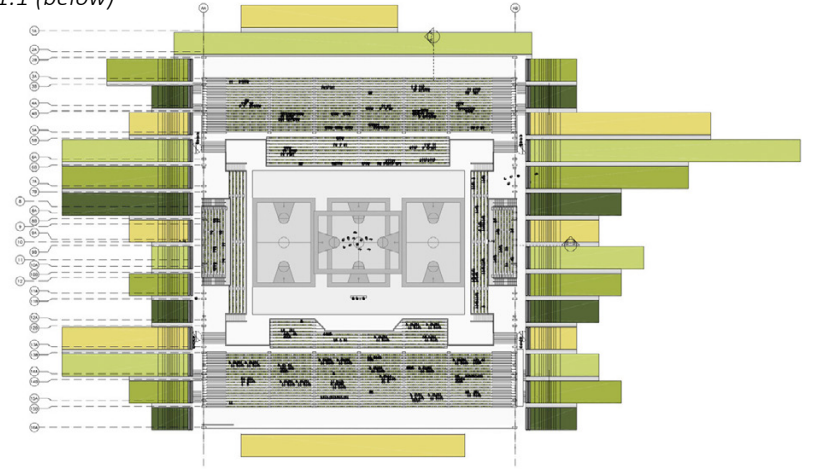


Figure 1.2 (below)

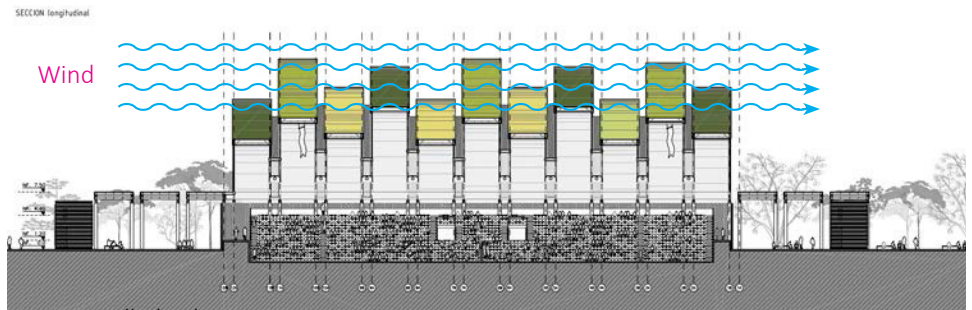
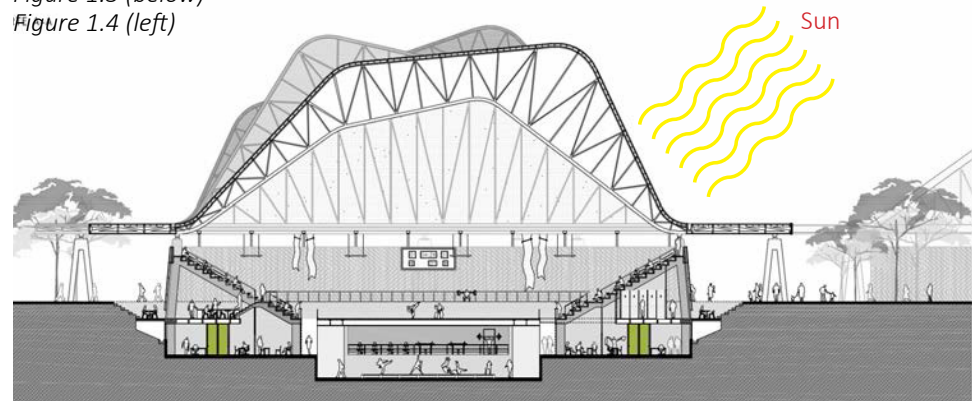


Figure 1.3 (below)

Figure 1.4 (left)



CITY OF CULTURE OF GALICIA

Architects: Peter Eisenman

Location: Santiago de Compostela, Spain

Year: 2012

Peter Eisenman creates a topographic surface and then extends roads from the city to create circulation paths within the complex. The project itself is one million square feet and is conceived of six buildings.

Image Captions:

Figure 2.1: Plan drawing of the City of Culture of Galicia showing connections from the city

Figure 2.2: Photograph highlight access roads and circulation paths

Figure 2.3 & 2.4: Sectional model produced by the architect

Figure 2.1-2.4: Archinect, "ShowCase: City of Culture of Galicia." Accessed November 29, 2012.
<http://archinect.com/features/article/91086/showcase-city-of-culture-of-galicia>



Figure 2.1 (below)
Figure 2.2 (left)

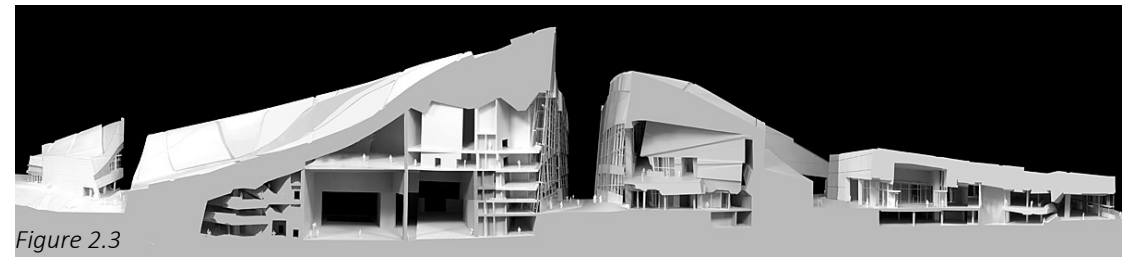
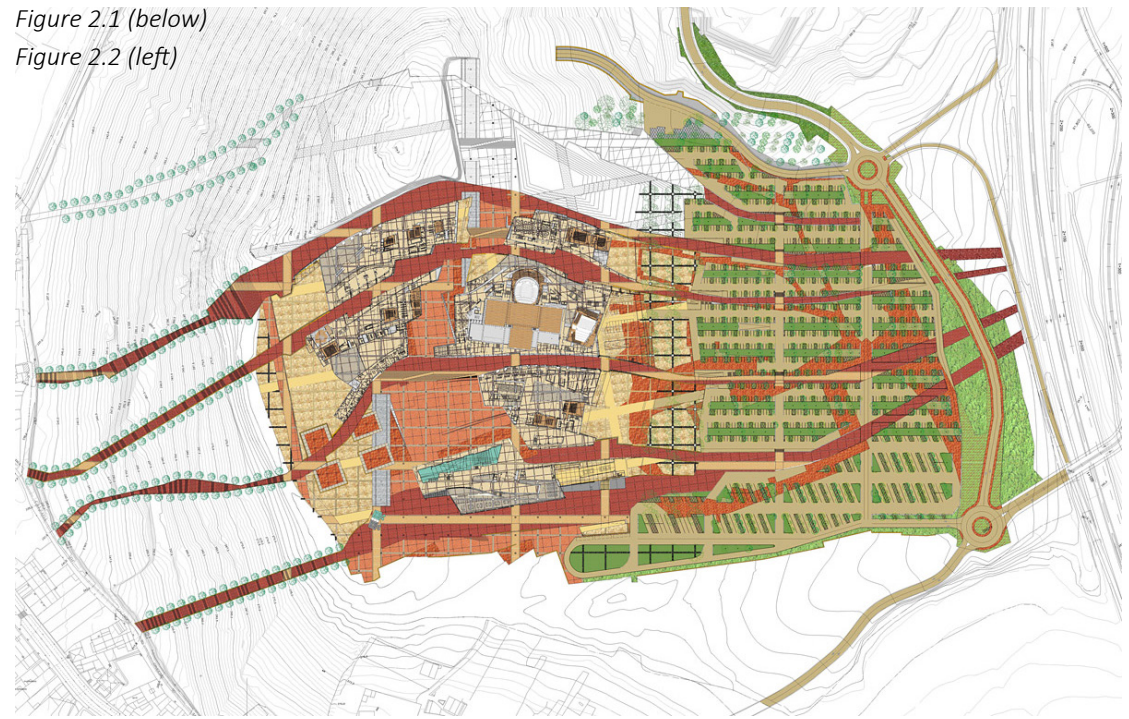


Figure 2.3

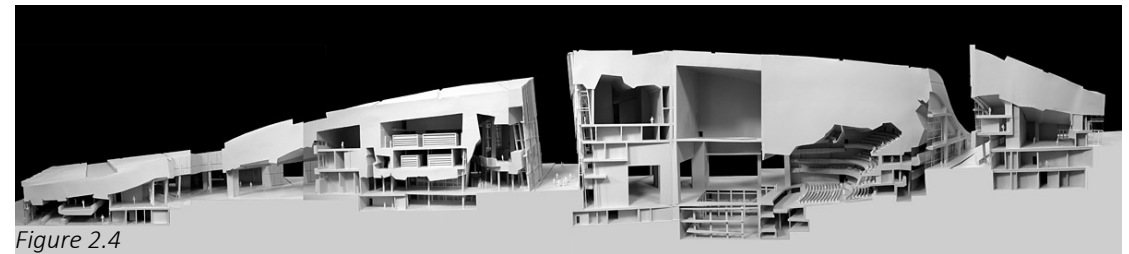


Figure 2.4

SANTA CATARINA MARKET

Architects: EMBT (Enric Miralles)

Location: Barcelona, Spain

Year: 1997-2005

Although Santa Catarina Market is an example of lofted surface condition there is potential of rupture. You see this at the two breaks in the surface (highlighted in red) that end up creating sky lights.

Image Captions:

Figure 3.1: Photograph of the roof showing the skylight

Figure 3.2: Showing separated roof pieces flattened on a 2D surface

Figure 3.3: Exploded axon showing structure and the roof with two ruptures highlighted

Figure 3.4-3.3.7: Sectioning of Santa Catarina Market and different arrangements to find gaps and to create further rupturing

Figure 3.1 & 3.2. EMBT: Enric Miralles, Benedetta Tagliabue: work in progress, (Barcelona: Actar, 2004).

Figure 3.3-3.7: Author

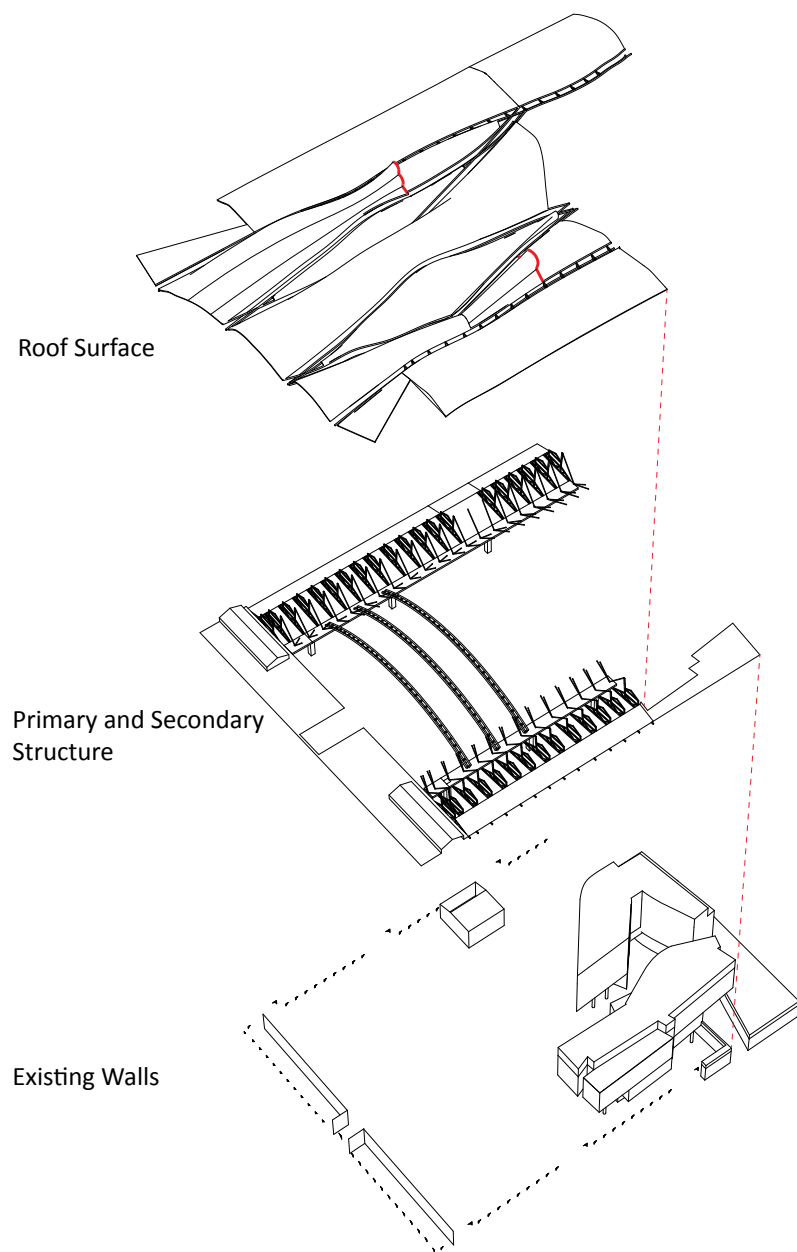


Figure 3.1



Figure 3.2 (right)

Figure 3.3 (left)

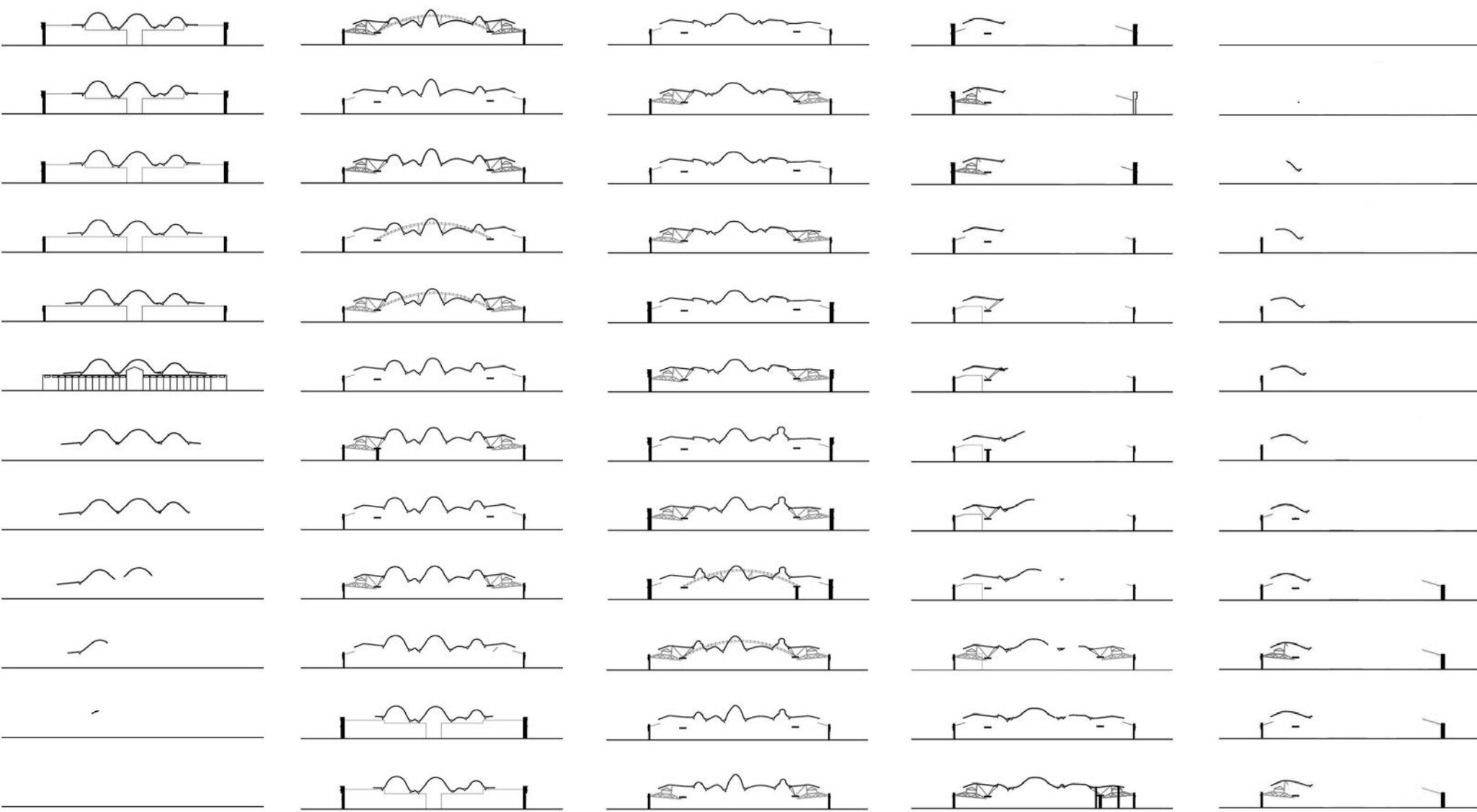


Figure 3.4: Sections in a series

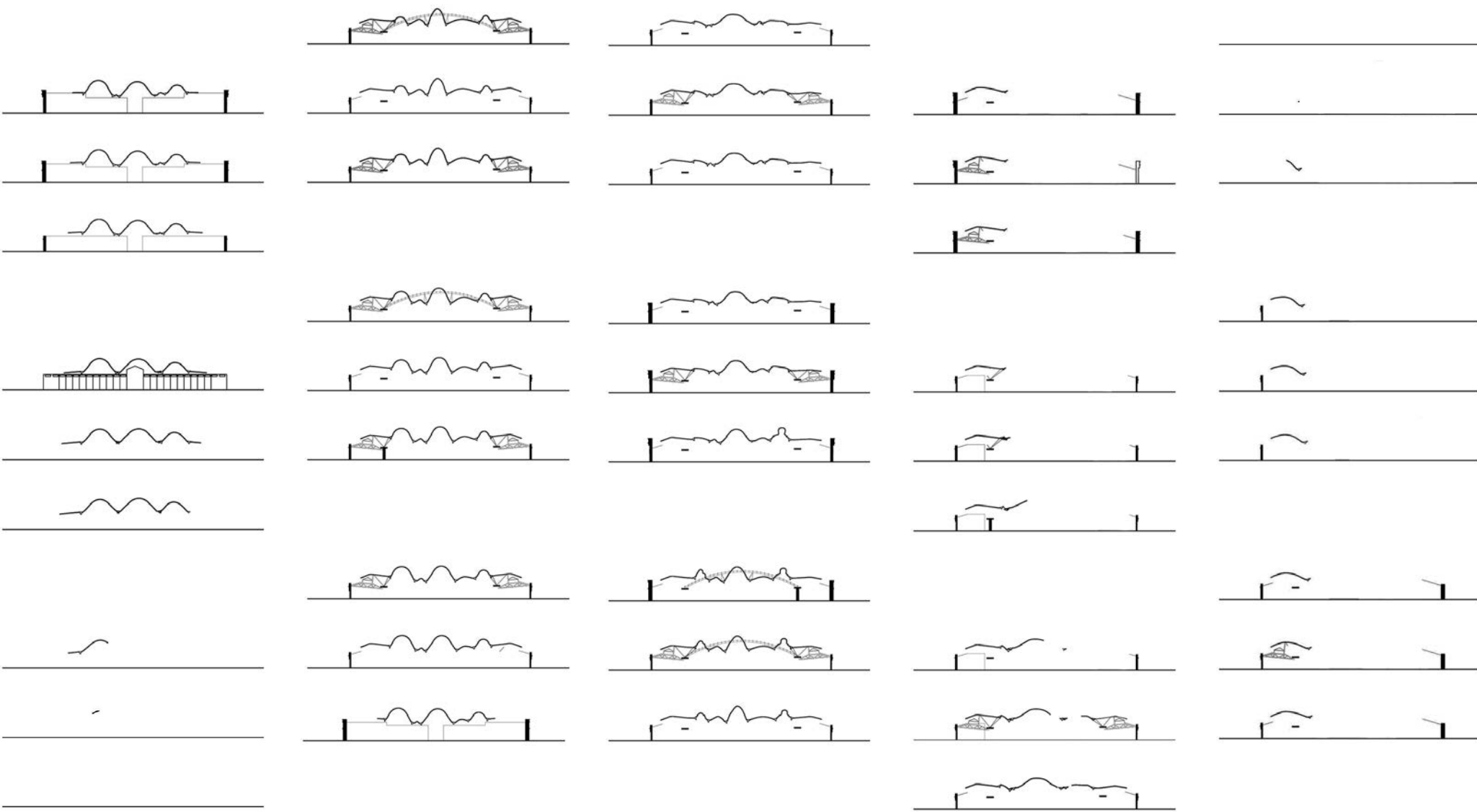


Figure 3.5: Every 4rth section has been taken out

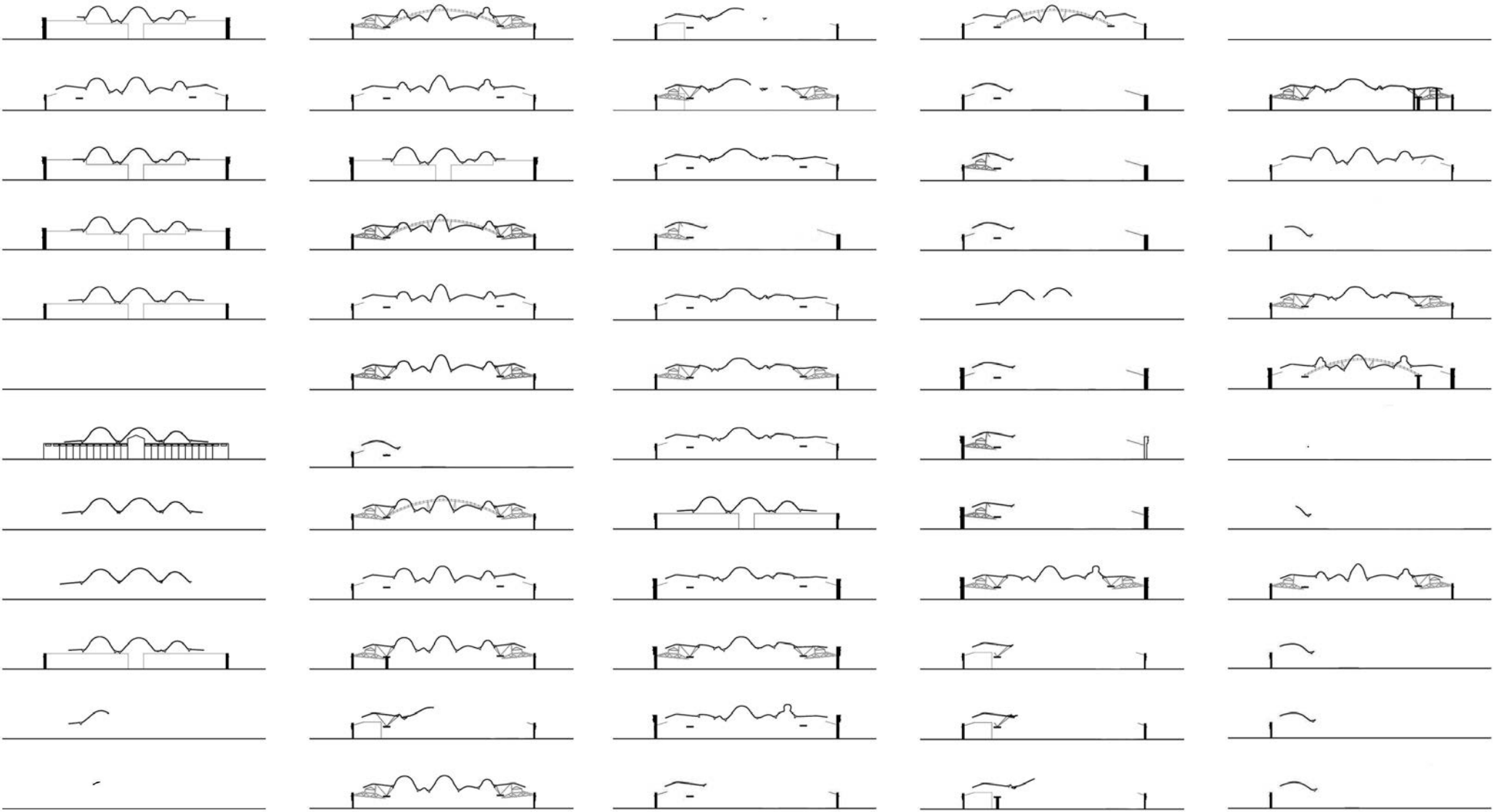


Figure 3.6: Every 4rth section is placed at random

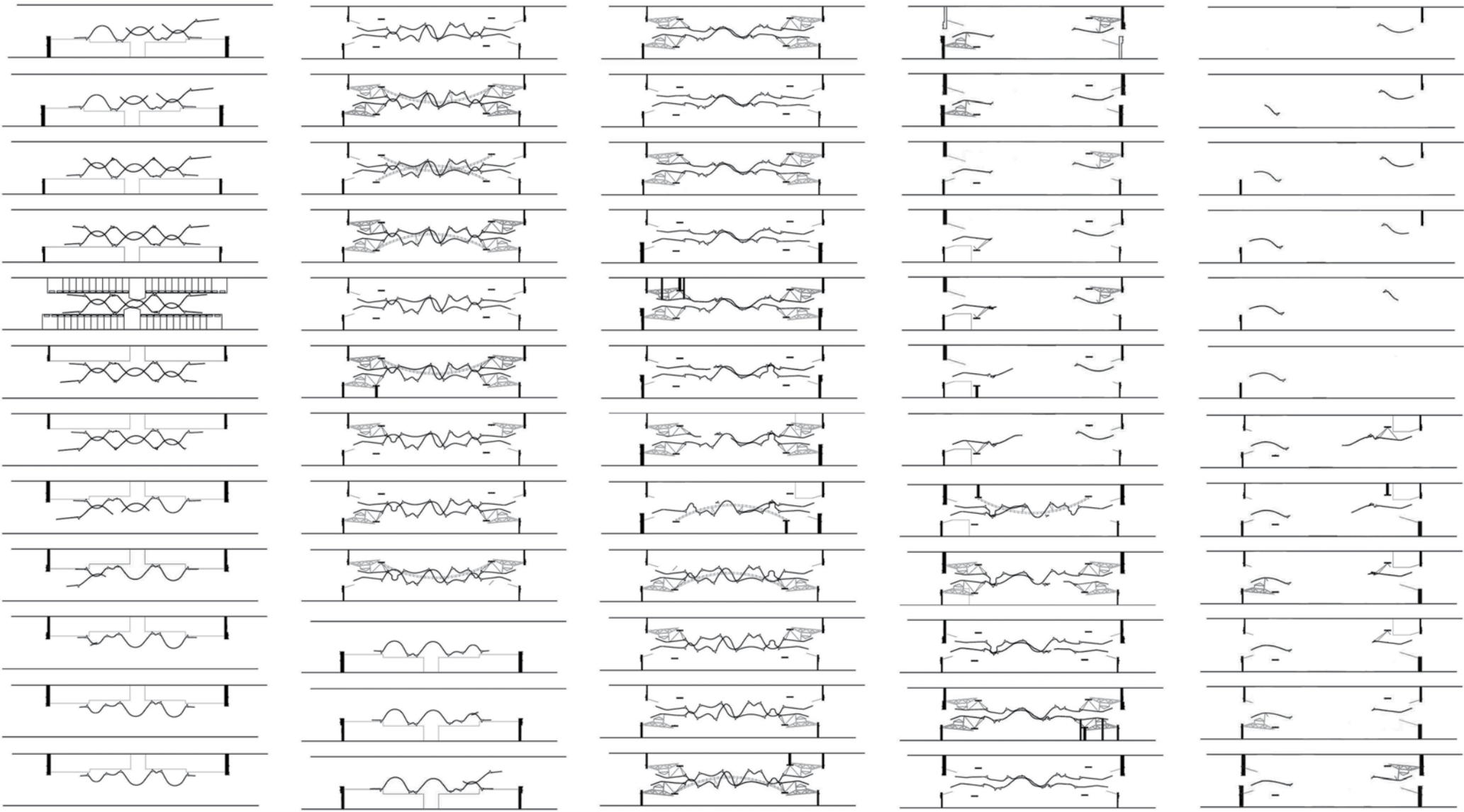


Figure 3.7: Every section has an additional section overlaid & upsidedown

YOKOHAMA INTERNATIONAL PORT TERMINAL

Architects: Foreign Office Architects

Location: Yokohama, Japan

Year: 2002

Although Yokohama International Port Terminal is an example of lofted surface condition there is potential of rupture. You see this at the four breaks in the surface (highlighted in red) that end up creating outdoor amphitheater, viewing area, and opportunities to insert large curtain walls.

Image Captions:

Figure 4.1: Exploded axon showing the different levels and the ruptures in the public park

Figure 4.2-4.4: Photographs showing conditions at the ruptured areas

Figure 4.5-4.8: Sectioning of the terminal to find gaps and additional rupturing

Figure 4.1-4.8. Farshid Moussavi, and Alejandro Zaera-Polo, The Yokohama Project: Foreign Office Architects, 42, 201.

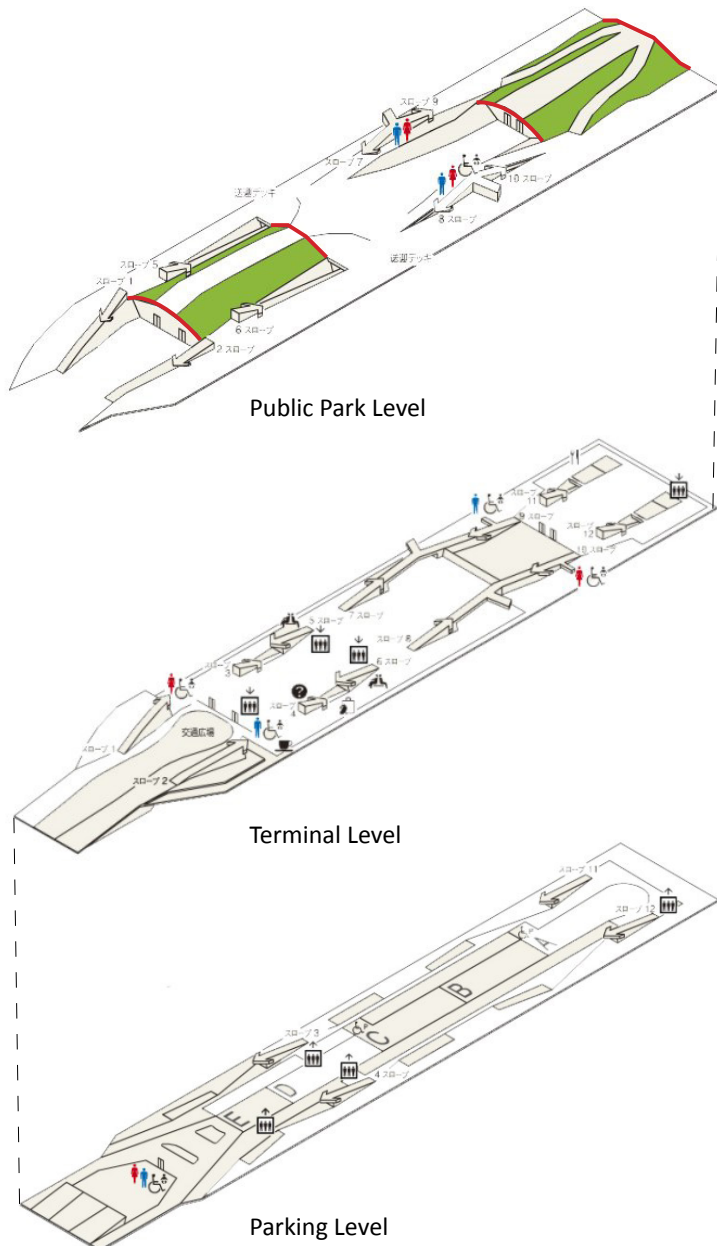


Figure 4.1



Figure 4.2



Figure 4.3



Figure 4.4

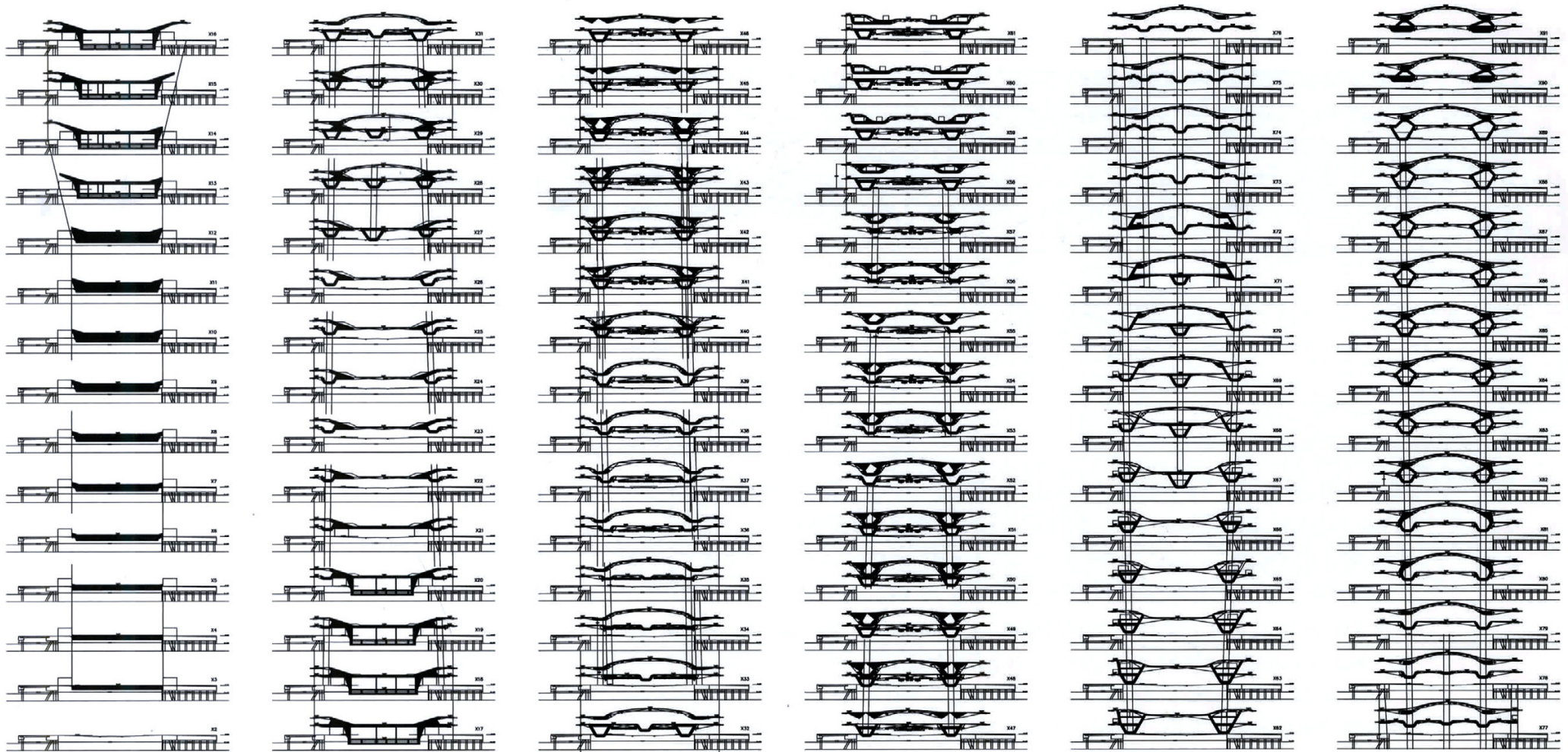


Figure 3.5: Sections in a series

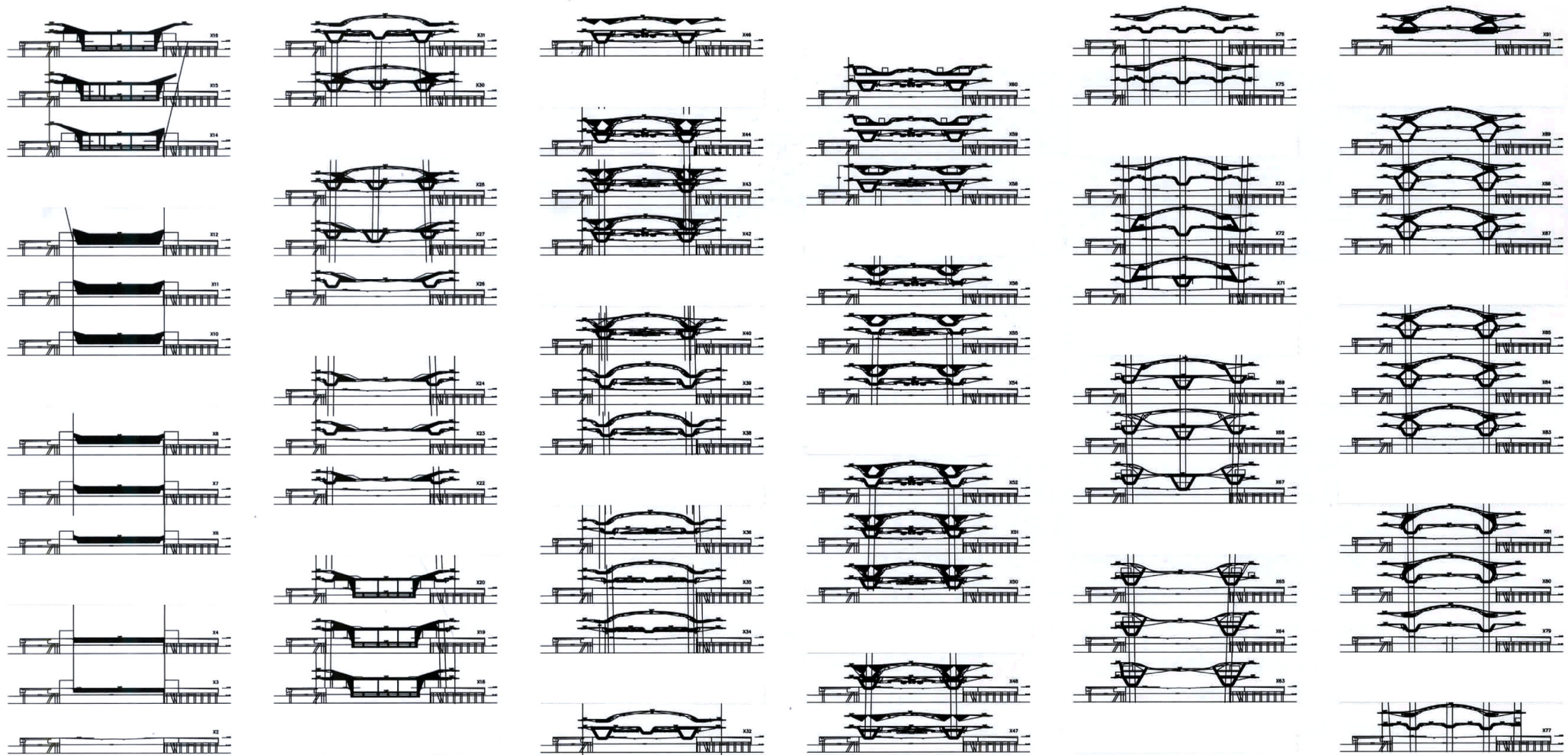


Figure 4.6: Every 4th section is missing

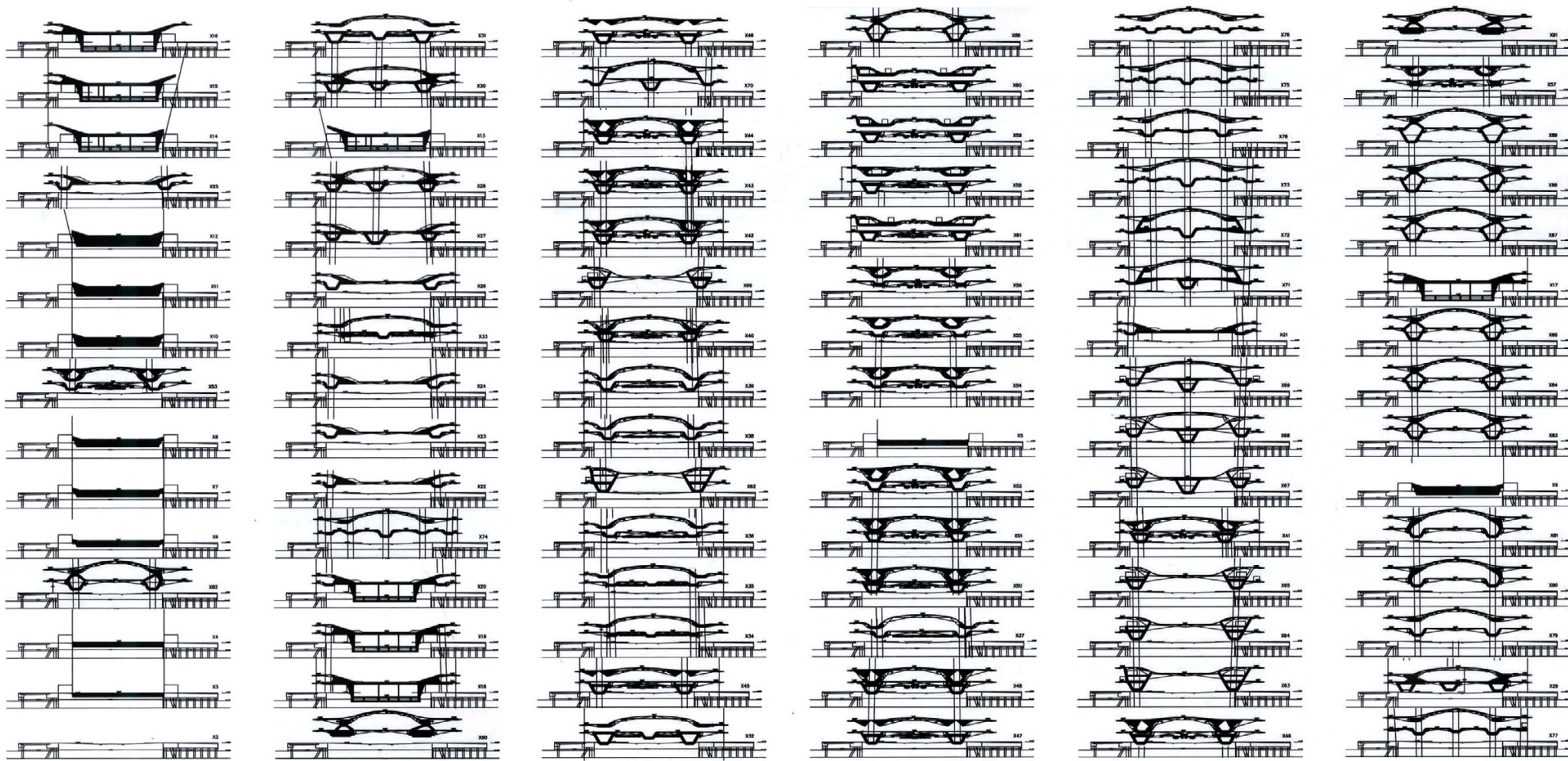


Figure 4.7: Every 4rthis placed at random

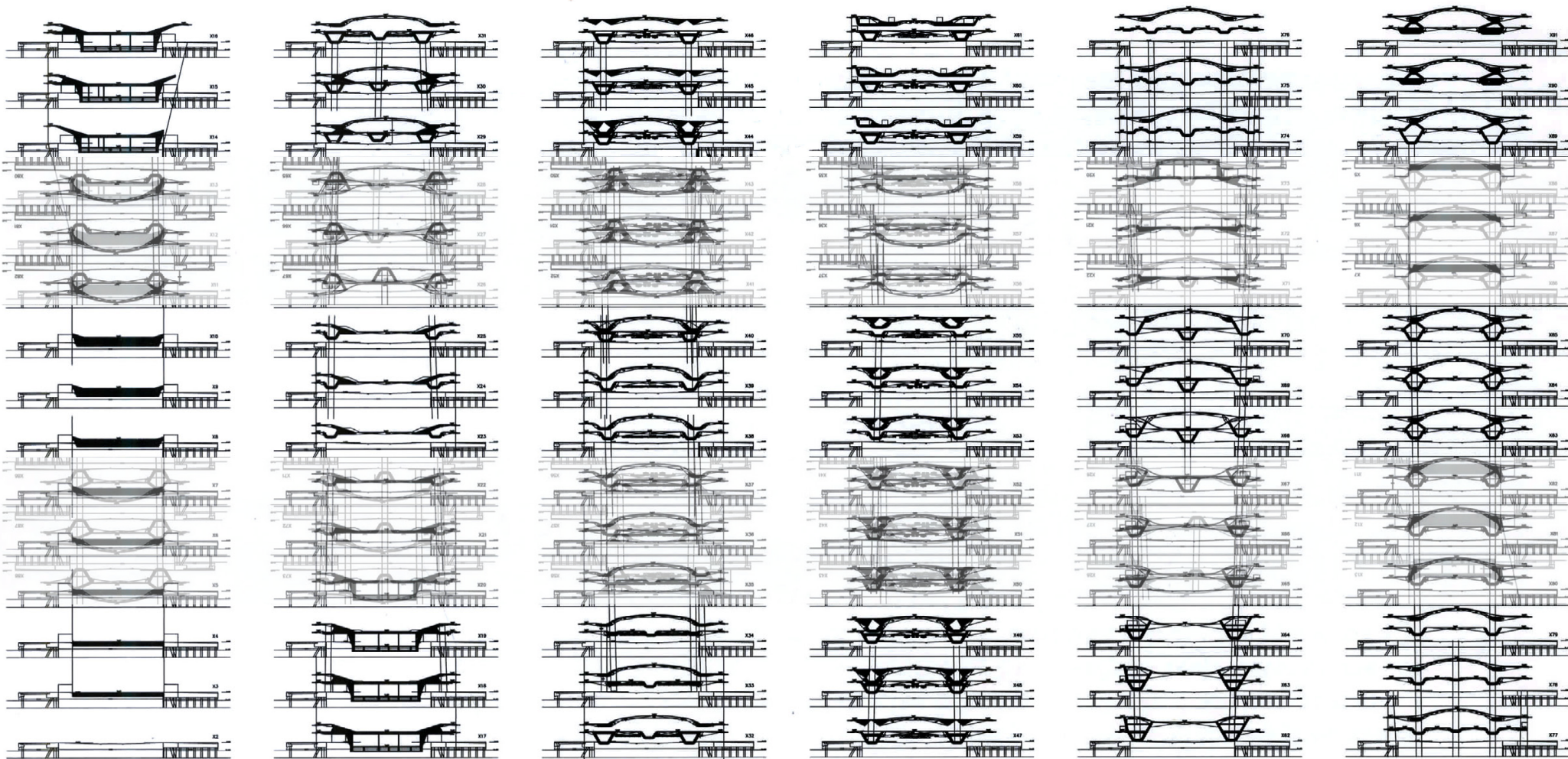


Figure 4.8: Three sections after every three are overlaid with an additional section

EMPIRE STATE PLAZA (*SITE*)

The Empire State Plaza provides ideal site conditions to test form & functional multiplicity through disturbing continuity due to its complexity in terms of history and its relationship to the adjacent neighborhoods. The entire plaza acts like a city within a city. It is so deeply integrated with the freeway infrastructure of the city that the workers on the site never engage the city itself. Like aliens they arrive in their pods (cars) and after work they are spit back onto the Mall arterial, on their way to the suburbs.

The plaza consists of ten buildings, which include: a forty-four story main office tower, four twenty-two story office towers, a seven story Justice Building, nine story Legislative Office Building, a six story (one thousand two hundred feet long) Swan St. Building, the Meeting Center (also known as The Egg), and an eight story Cultural Education Center, which also contains the Archives Center, the State Library, and the State Museum. Furthermore the six story podium, which elevates the entire complex, contains parking, service areas, mechanical systems, and laboratories.¹

1: "Halicarnassus on the Hudson: The Gov. Nelson A. Rockefeller Empire State Plaza, Albany, NY." *Progressive Architecture*. v.60.n.5 (1979): 106-109. Print.

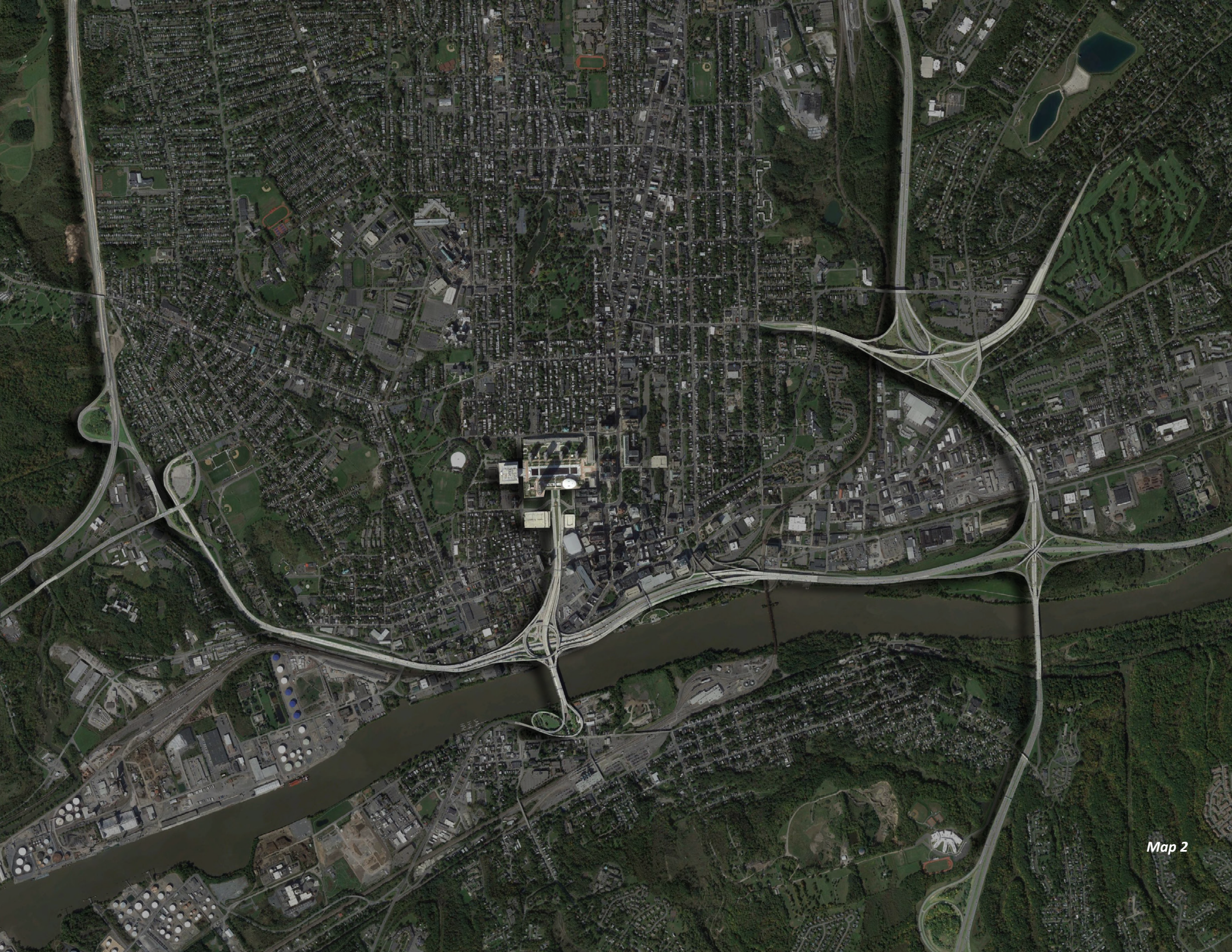




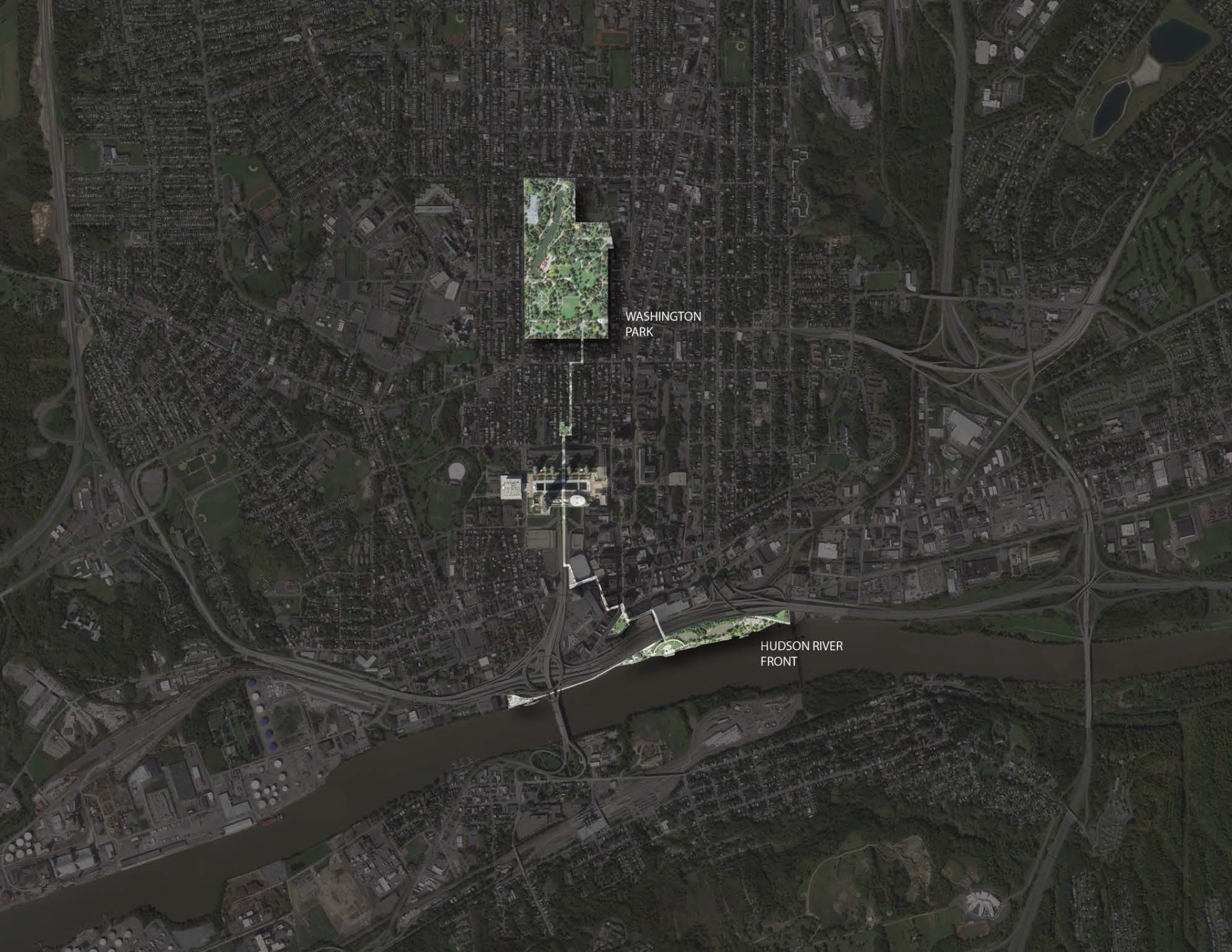
Image Captions:

Map 1: Shows location of The Empire State Plaza in Albany and the adjacent suburbs

Map2 & 3: Shows how the Empire State Plaza is more connected to the highway system than the city around it

Map 1-3: Author

Map 3



WASHINGTON
PARK



HUDSON RIVER
FRONT



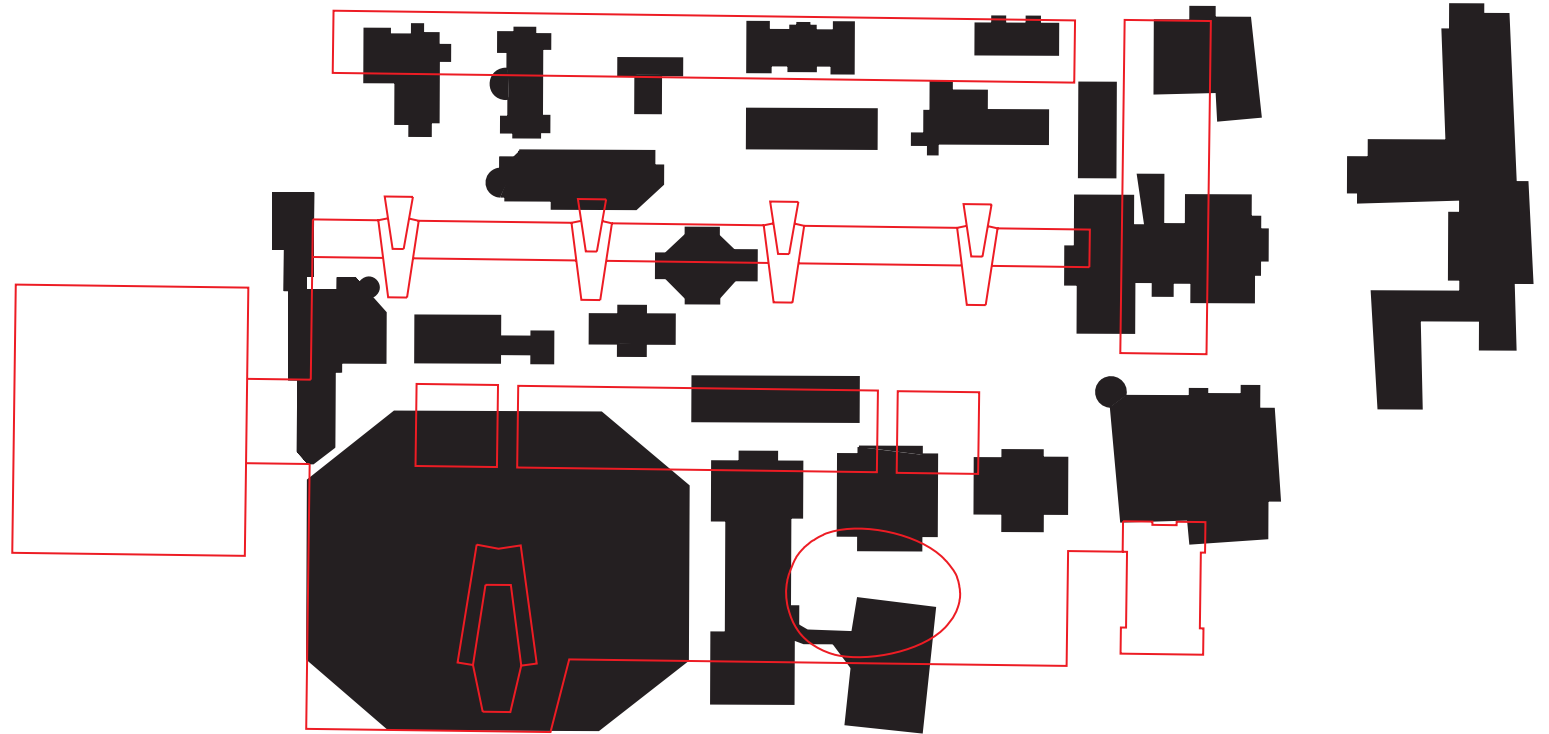
LAND USE

- OFFICES
- INTITUTIONAL
- COMMERCIAL
- RESTAURANT
- RECREATIONAL
- INDUSTRY
- PARKING GARAGE
- RESIDENTIAL





Figure 1



EMPIRE STATE PLAZA and SYRACUSE CAMPUS

Image Captions:
Figure 1 & 2: Size comparason

Figure 1 & 2: Author

Figure 2

EMPIRE STATE PLAZA HISTORY

Empire State Plaza was a pet project of Nelson A. Rockefeller, who was the governor at the time, and it was perhaps one of the most expensive projects ever undertaken by a state government for its office workers.

Rockefeller wanted to get rid of 100 acres of poor neighborhoods that were so embarrassing and, according to him, had no space in the elite status of Albany.²

Image Captions:

Map 4: Overlay of the Empire State Plaza outline on a 1950~ sanborn map

2: Winslow, Jon. "Hall of Shame, Empire State Plaza." pps.org. Project for Public Spaces, 23 April 2003. Web. 16 Dec 2011. <http://www.pps.org/great_public_spaces/one?public_place_id=760>.

Map 4 (Sanborn map): Sanborn.umi, "Digital Sanborn maps 1867-1970." Accessed November 30, 2012. <http://sanborn.umi.com/ny/>

Map 4 (overlay diagram): Author



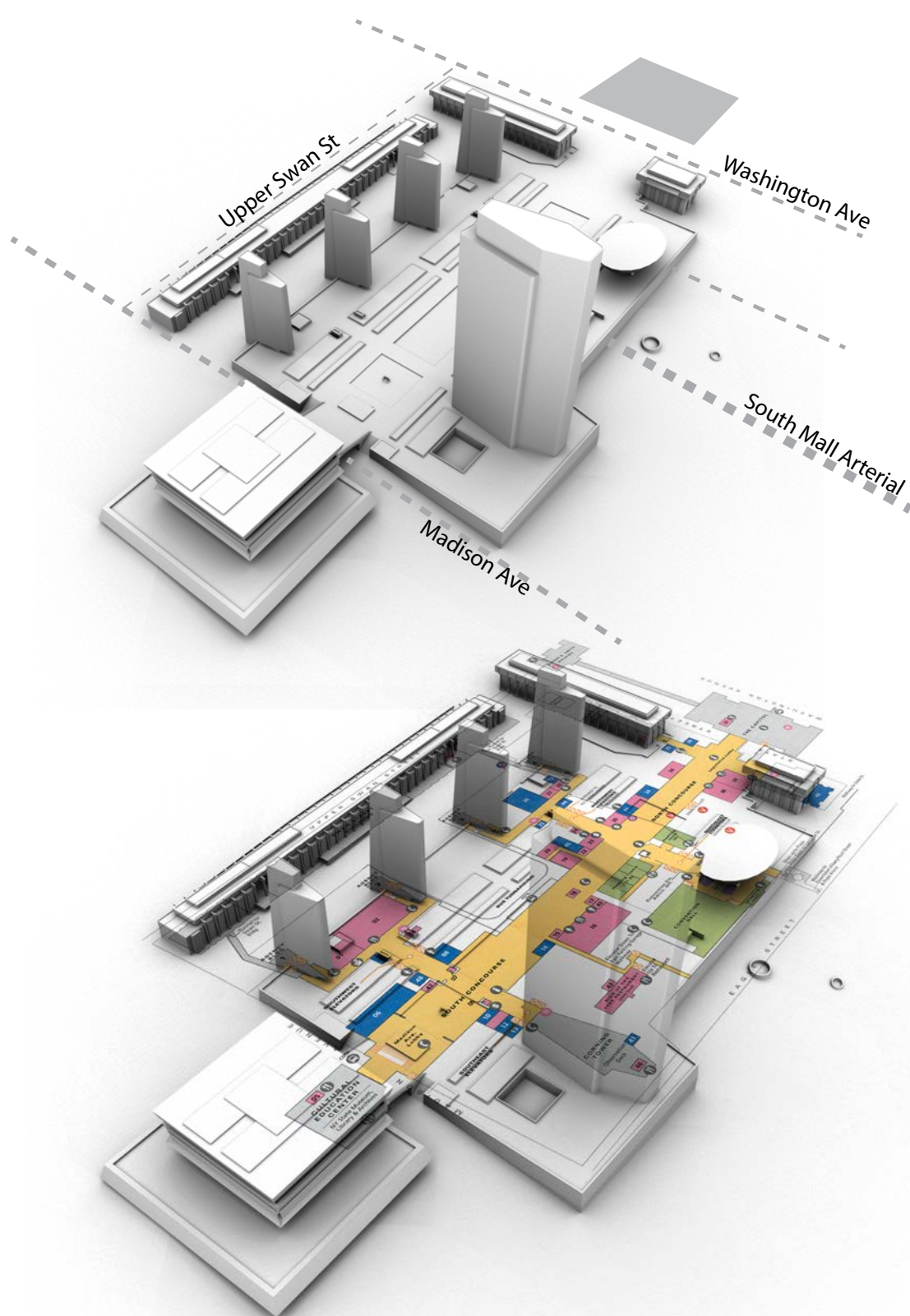
38

39

40

40

Map 4



- | | |
|--|---------------------------------|
| ■ PUBLIC CORRIDORS | Information |
| ■ CONVENTION CENTER | ATM |
| Convention Hall | Phones |
| Meeting Rooms 1-7 | Elevators |
| Administrative Office | Escalator |
| ■ THE EGG | Restrooms |
| Administrative Office | Dining |
| Box Office | Vending Machine |
| Hart Theatre | CDTA (public bus depot) |
| Swyer Theatre | PARK and PAY Station |
| ■ RETAIL/FOOD | V-LOT Visitor Parking |
| 01 YMCA | Newsstand |
| 02 Pastabilities Cafeteria | Not Handicapped Accessible |
| 04 Scissor Wizard Hair Styling | Martin Luther King Jr. Memorial |
| 05 Subway | |
| 07 NexGen Wireless | |
| 09 Just Jewelry Repair | |
| 15 McDonald's/Sandella's | |
| 16 Plaza Food Court Cafeteria | |
| 17 Hutch House Bakery (Starbucks) | |
| 18 Lark Street Flower Market | |
| 19 Scott's Hallmark | |
| 20 American Red Cross | |
| 22 Peanut Land Express | |
| 23 Citizens Bank | |
| 24 Thomas's Famous Shoe Shine | |
| 27 GHI Family Dental Practice | |
| 28 SEFCU Credit Union | |
| 30 Key Bank | |
| 34 Legislative Gazette | |
| 37 Capitol Deli Cafeteria | |
| 38 Liberty Market Cafeteria | |
| 39 Albany Room Restaurant | |
| 42 Swan Street Grill | |
| 43 Sign of the Tree (Plaza Level) | |
| 46 29th Floor Cafe | |
| 47 African Reflections | |
| 49 Sodexo Catering Office | |
| ■ STATE OFFICES | |
| 06 NY Network Broadcast Ctr. | |
| 08 OGS Plaza Manager, Cultural Events | |
| 10 Post Office | |
| 12 Employee Health Services | |
| 13 OGS Conference Room | |
| 14 New York State Police | |
| 25 NYS Deferred Compensation Plan | |
| 26 OFT Telecommunications | |
| 29 Empire State College | |
| 31 PLAZA VISITOR CENTER & I LOVE NY INFORMATION | |
| 33 Employee Assistance Program | |
| 35 NYS Assembly Payroll & Travel Unit | |
| 36 NYS Assembly Human Resources | |
| 40 Vietnam Gallery | |
| 41 Observation Deck | |
| 44 Department of State/Fire Prevention and Control | |
| 45 CSEA Local 660 | |
| 48 OGS Food Service Office | |
- ACCESS TO PLAZA LEVEL through the following buildings:
 Corning Tower
 Agency Buildings 1, 2, 3 & 4
 The Egg
 The Capitol
 Cultural Education Center
- *The Concourse is handicapped accessible, except where noted.

Figure 3



Image Captions:

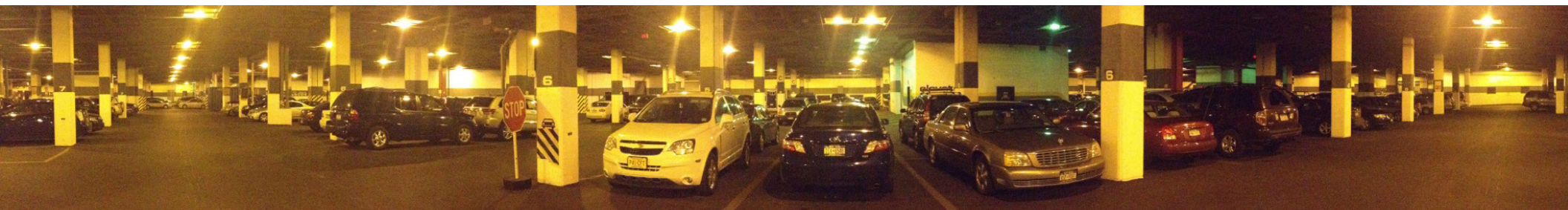
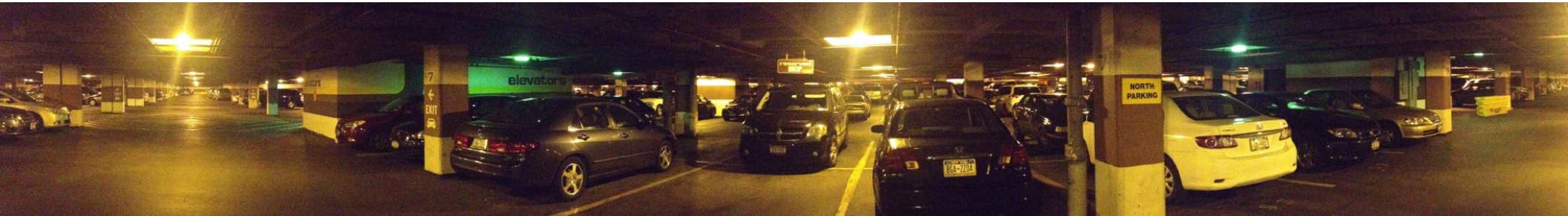
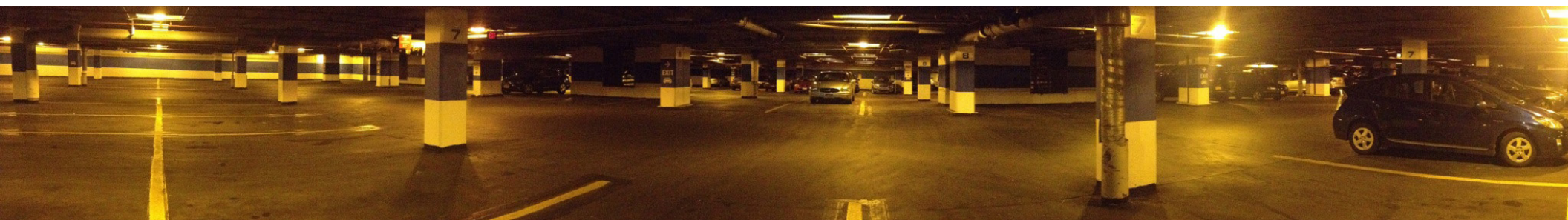
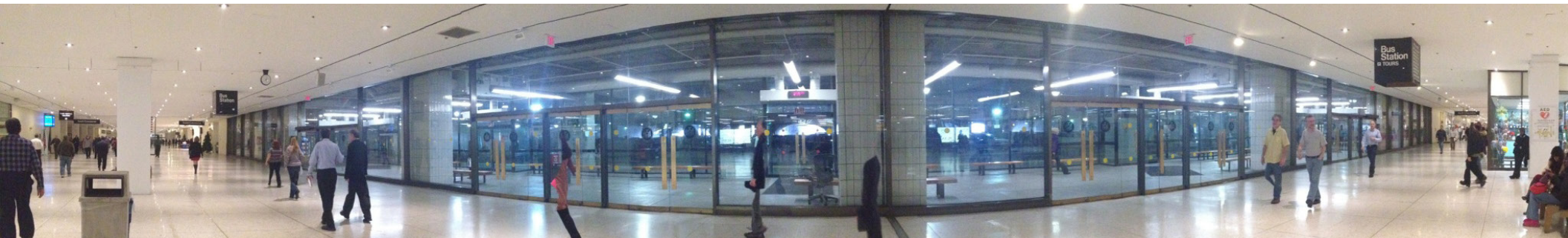
Figure 3: Showing adjacent roads and program in the concourse level

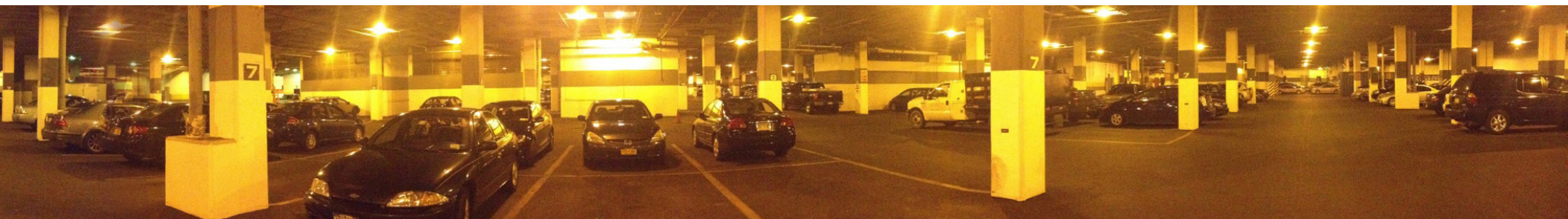
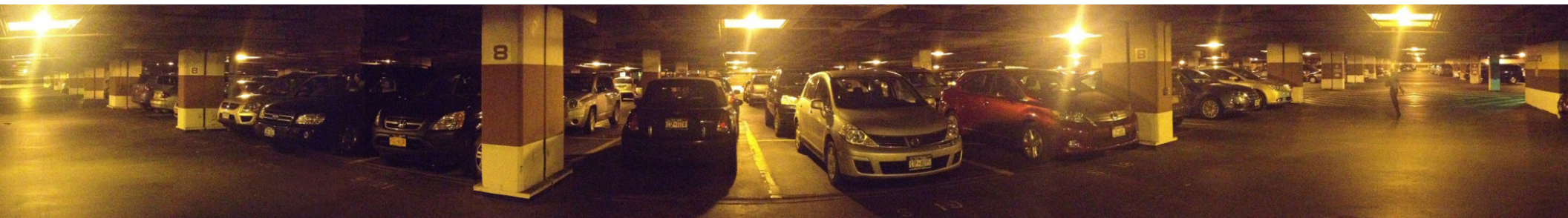
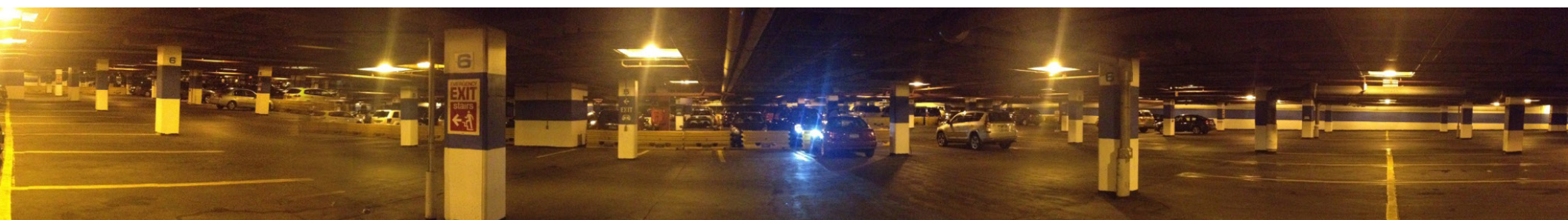
Figure 4: Section series of the Plaza

Figure 3: 3D model from google warehouse (rendered & manipulated by author)

Figure 4: Author

Figure 4





PROGRAM: *Existing*

Image Captions:

Figure 5, 6, & 7: Showing different levels below the Plaza

Figure 5: Received from the architect on site

Figure 6 & 7: Author

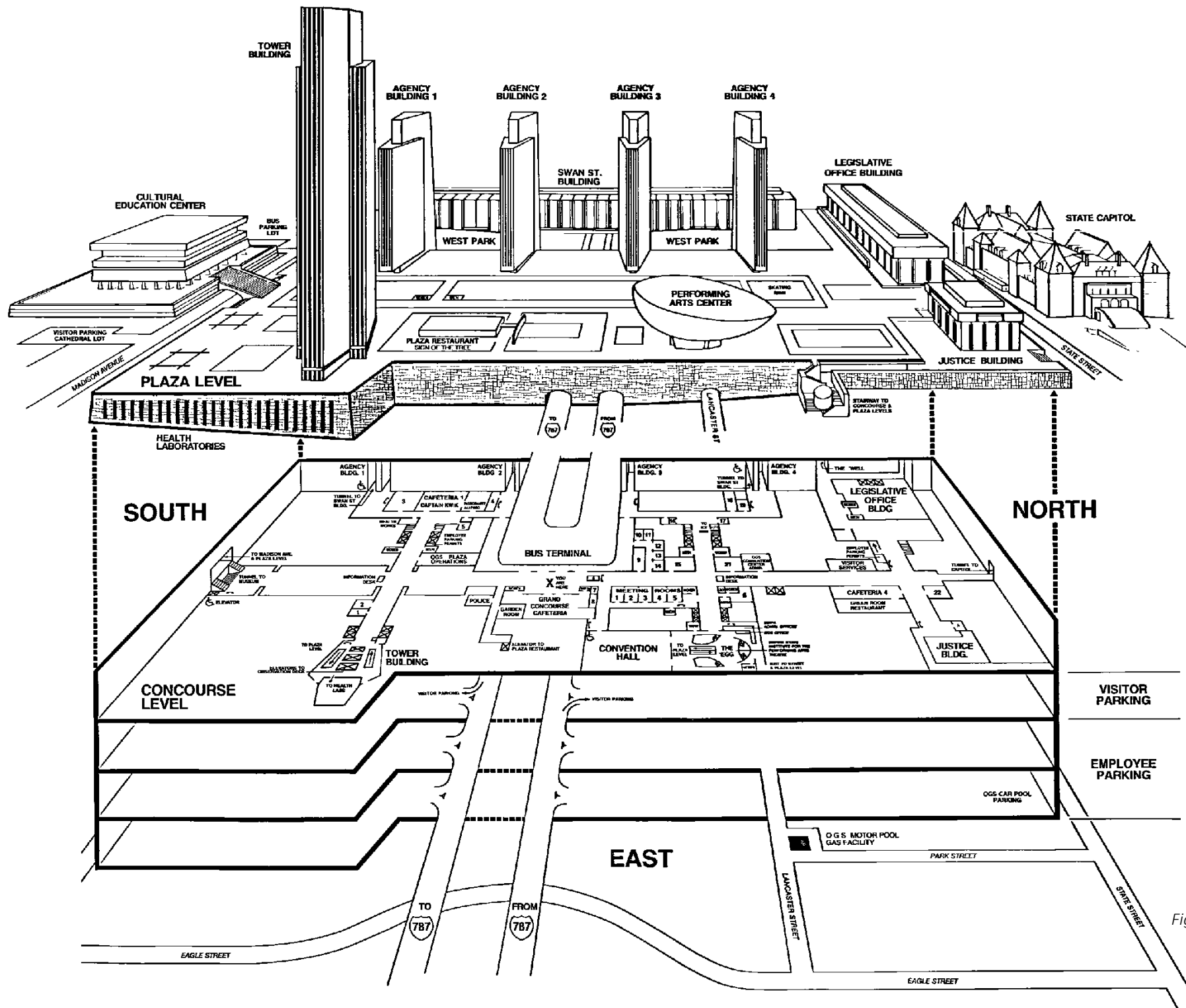


Figure 5

PLAZA LEVEL

PEDESTRIAN STREET ACCESS TO PLAZA LEVEL
ACCESS TO EXECUTIVE PARKING

PEDESTRIAN ACCESS TO PLAZA LEVEL
VIA STAIRS

SERVICE ROAD
ACCESS

MADISON AVE ACCESS
TO PARKING LEVEL

MADISON AVE

TUNNEL ACCESS TO
CAPITOL BUILDING

STATE STREET (ABOVE)

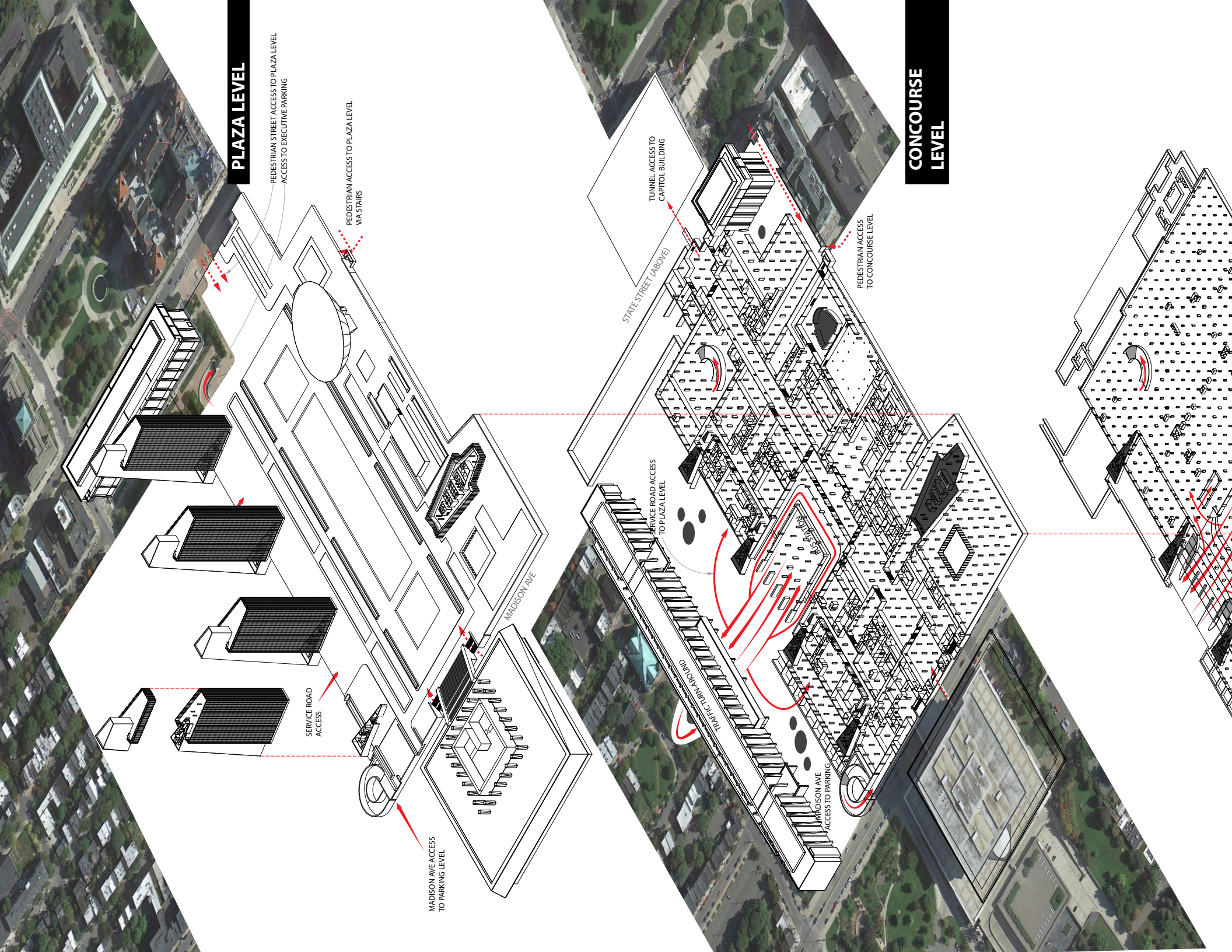
SERVICE ROAD ACCESS
TO PLAZA LEVEL

INTEC CIRCULAR ROAD

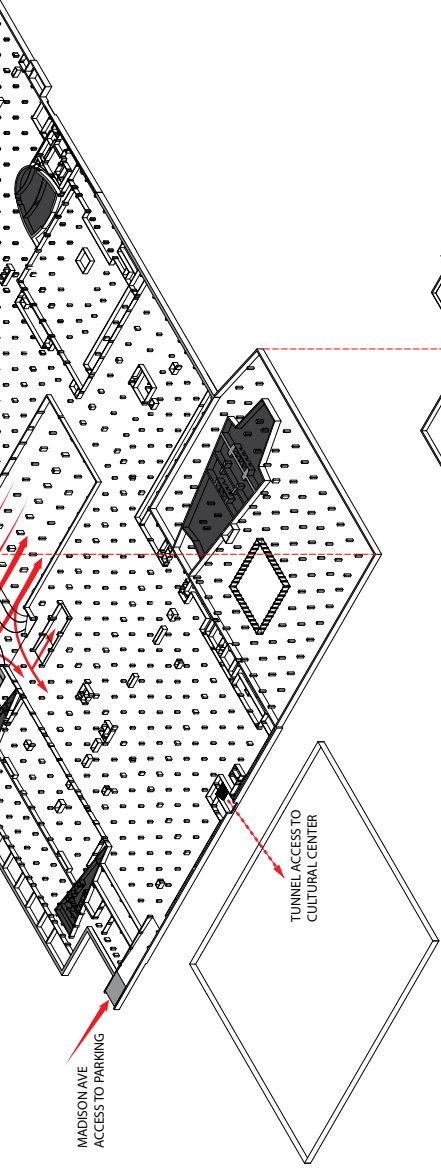
MADISON AVE
ACCESS TO PARKING

CONCOURSE LEVEL

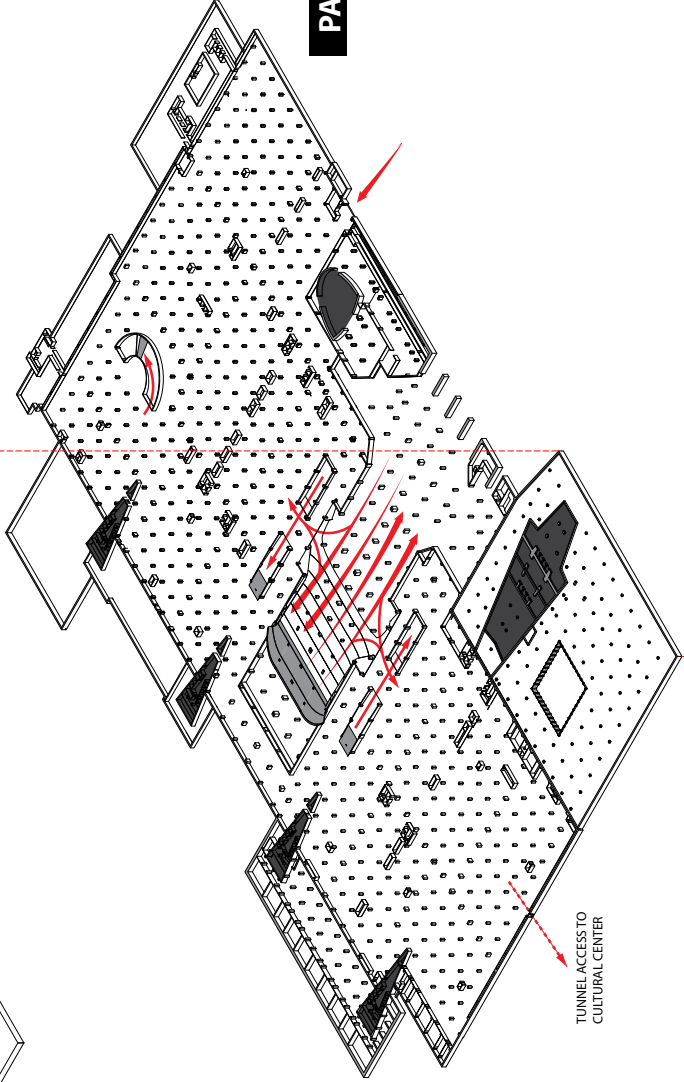
PEDESTRIAN ACCESS
TO CONCOURSE LEVEL



PARKING LEVEL 3



PARKING LEVEL 2



PARKING LEVEL 1

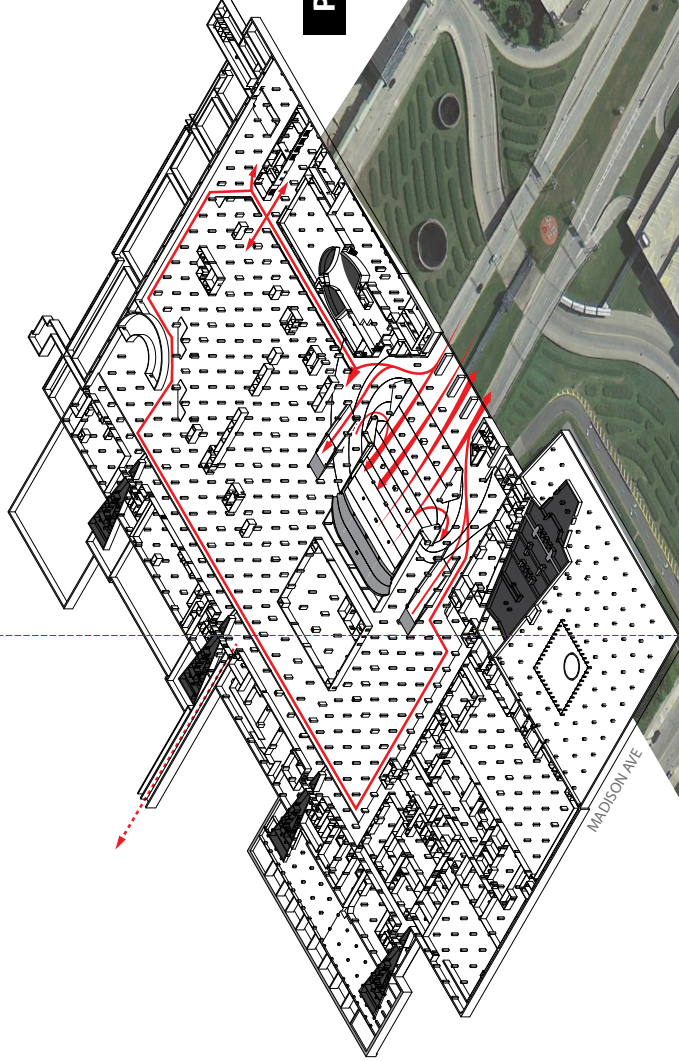
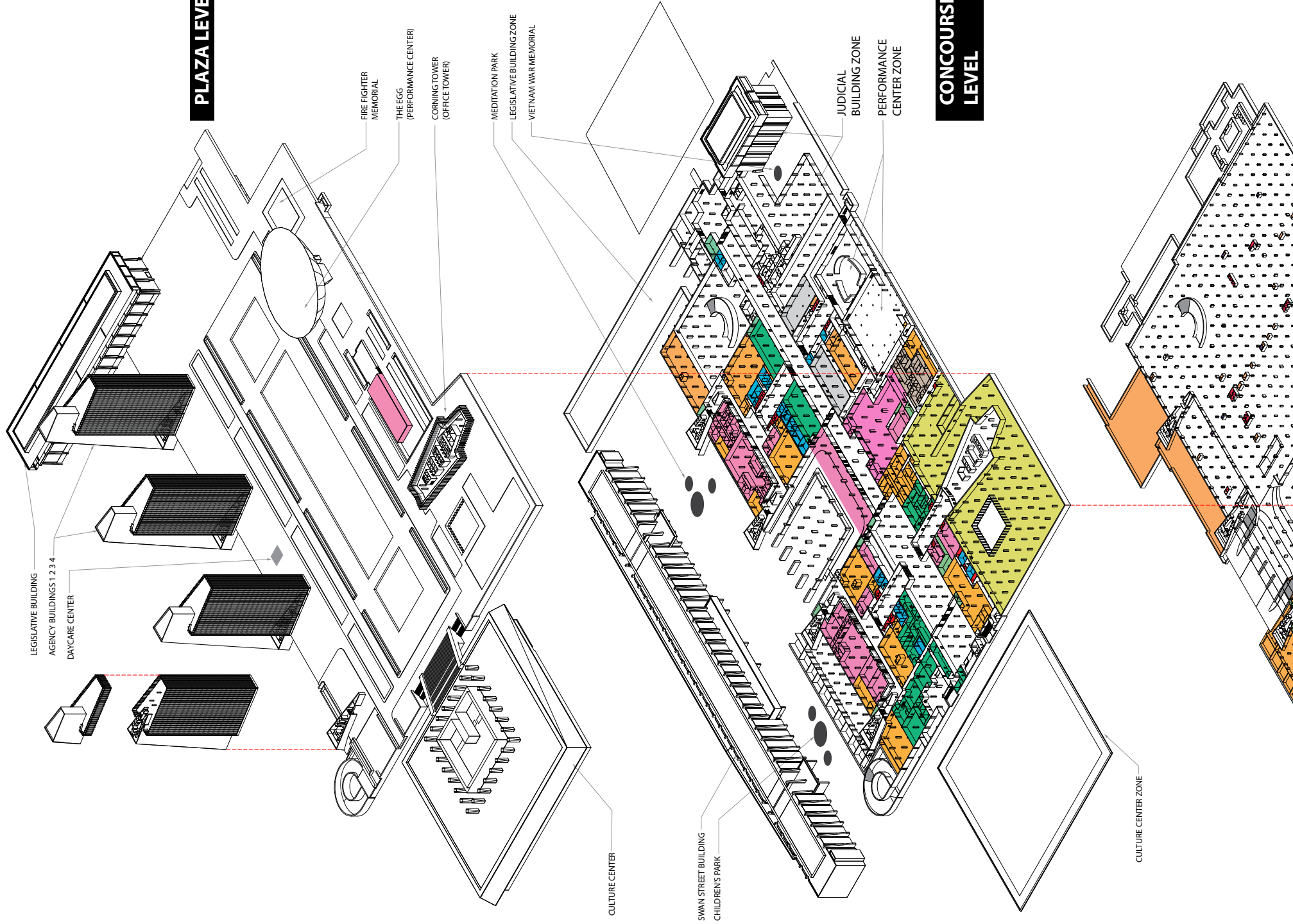


Figure 6



PARKING LEVEL 3

- MAIL ROOM
- MECHANICAL ROOM / SHAFT
- SERVICE AREA
- HEALTH DEPARTMENT LABS
- STORAGE
- BATHROOMS / LOCKER
- VERTICAL CIRCULATION
- OFFICES
- PARKING BOOTH
- MEETING ROOM
- PUBLIC INTEREST
- CAFE
- BUS STATION
- SHOPS

PARKING LEVEL 2

PARKING LEVEL 1

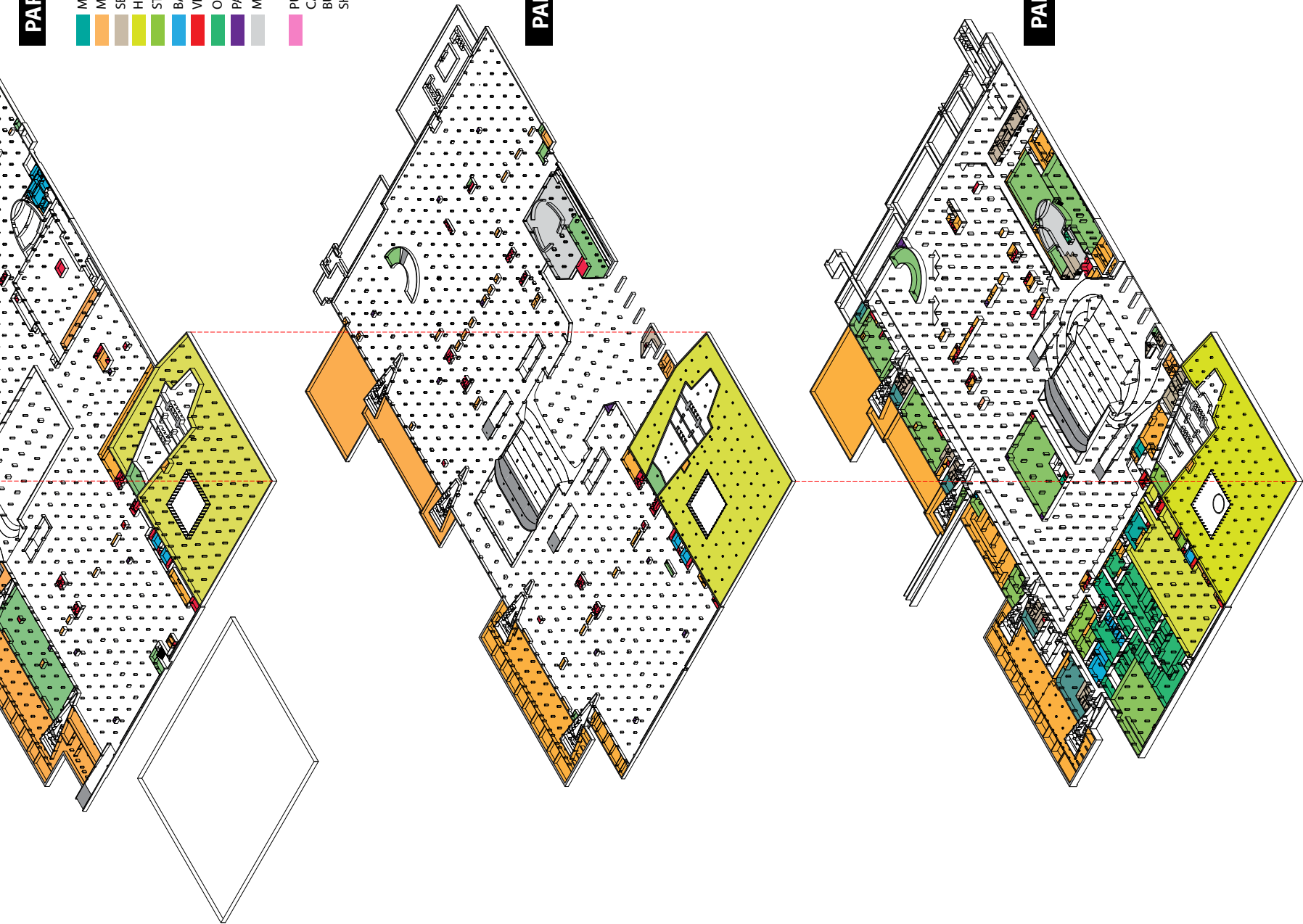


Figure 7

EVENT SPACES

Project: Busan Cinema Complex (un-built)

Architects: Steven Holl

Location: Busan, Korea

Year: 2005

For event spaces I am looking at Busan Cinema Center. The building staggers the theaters and the in-between space becomes the active zone with various events. It is a true public building that invites interaction and multiplicity of function.

Image Captions:

Figure 1.1 - 1.3: Showing the event spaces

Figure 1.1-1.3: . "BUSAN CINEMA COMPLEX." stevenholl.com. Steven holl Architects. Web. 13 Dec 2012. <<http://www.stevenholl.com/project-detail.php?id=105&worldmap=true>>.

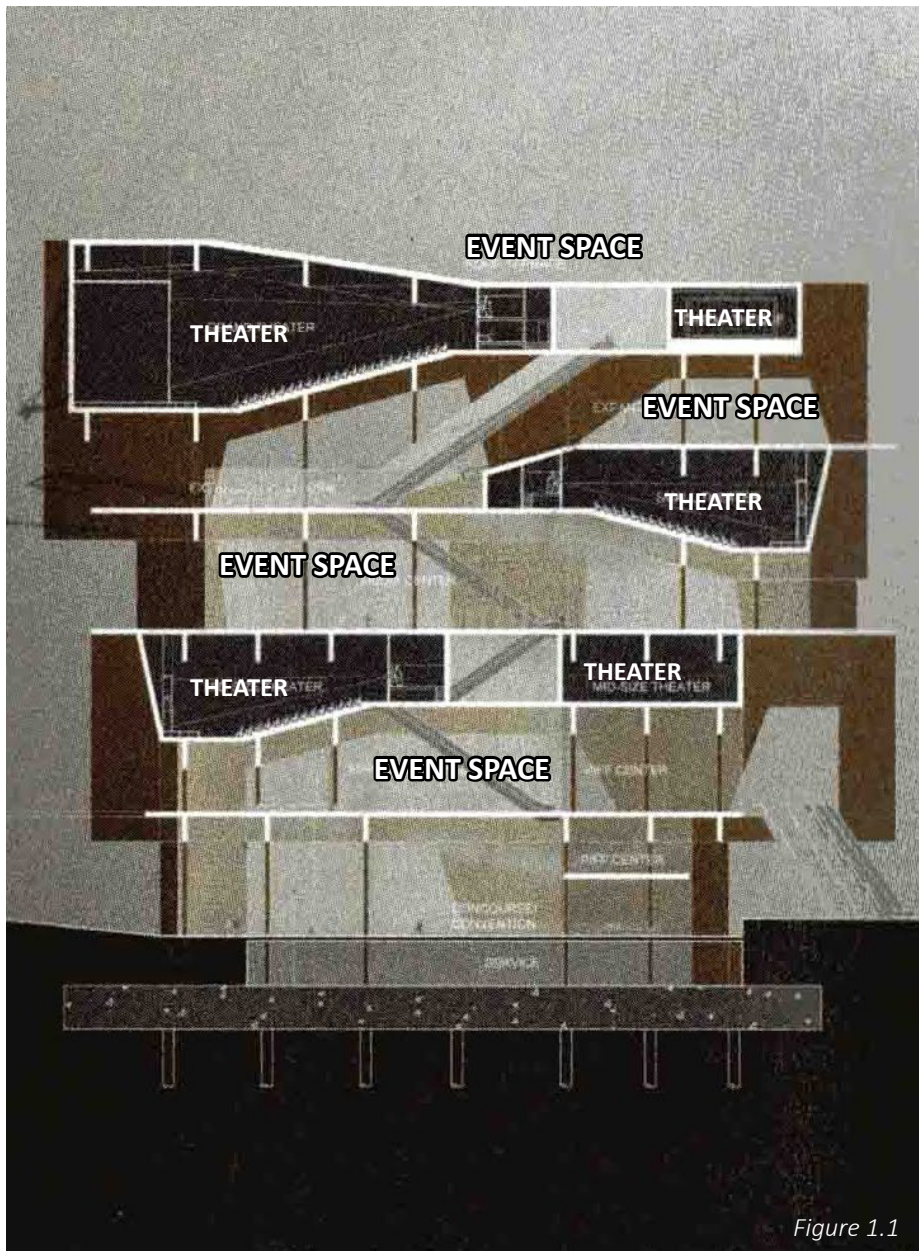


Figure 1.1



Figure 1.2

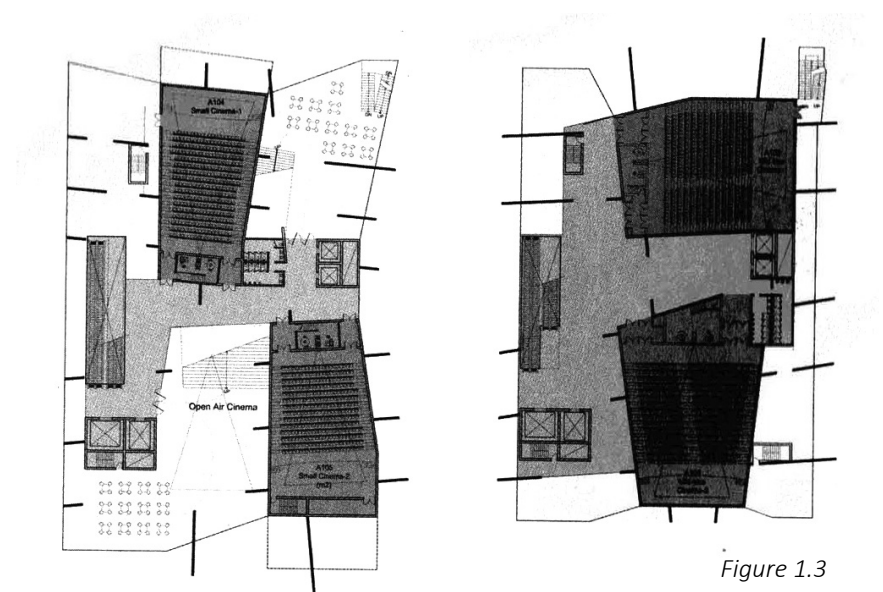
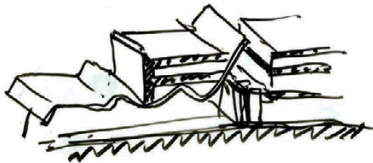
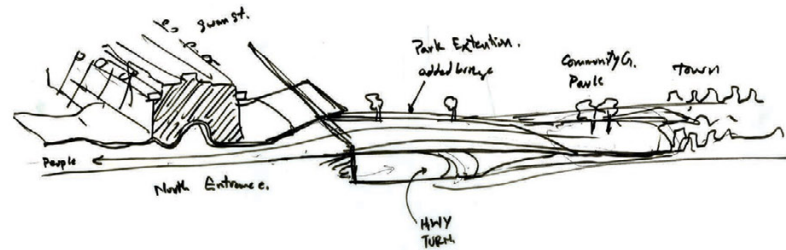
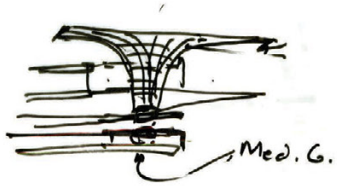


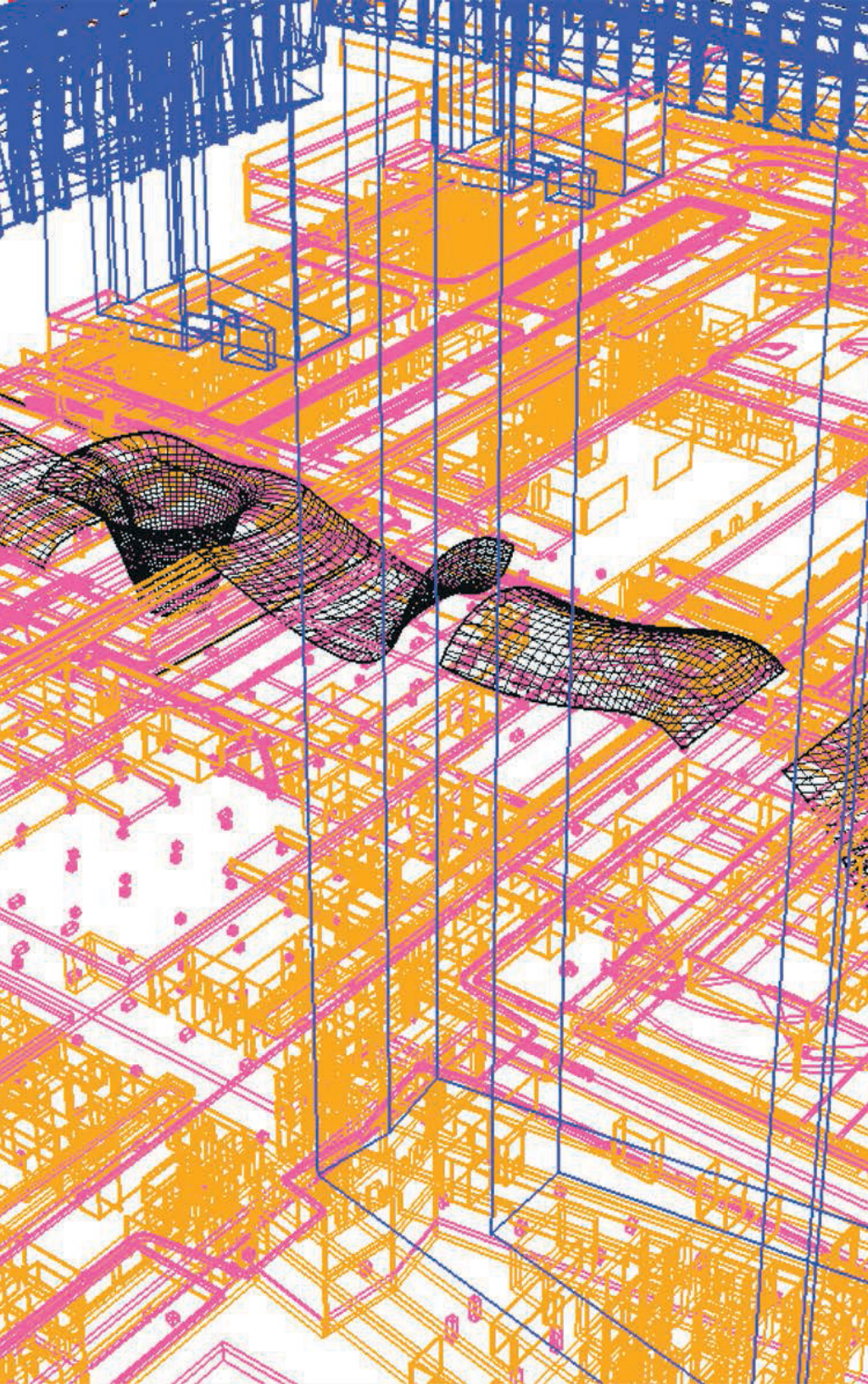
Figure 1.3

DESIGN SCHEMES: *Sketches*

The proposed Program is a series of amphitheaters, market, and basketball/tennis court.

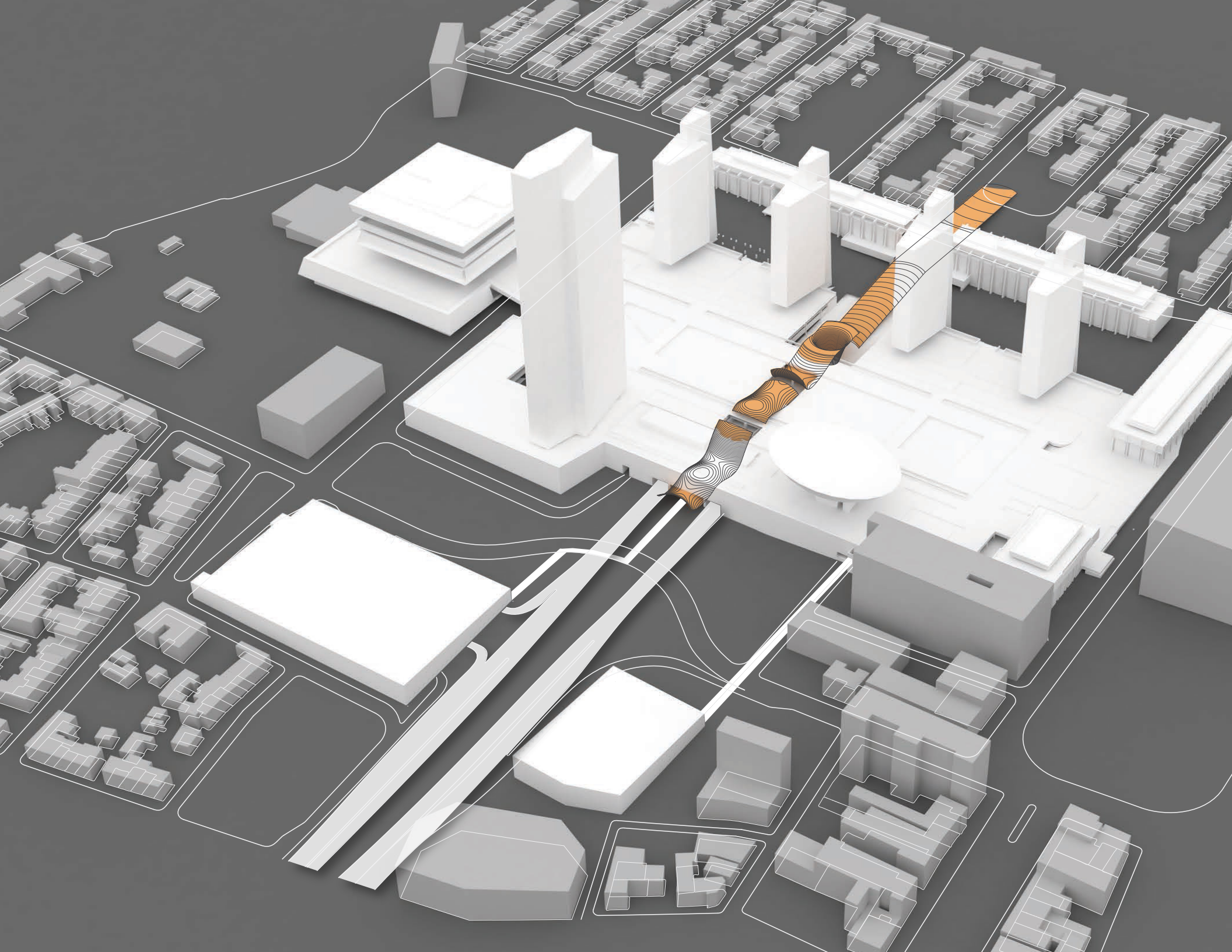
Following sketches and diagrams try to fit the public program and requirements of light through additive and subtractive strategies. Additive is the surface and the subtractive elements are the cuts similar to that of Gordon Matta Clark.

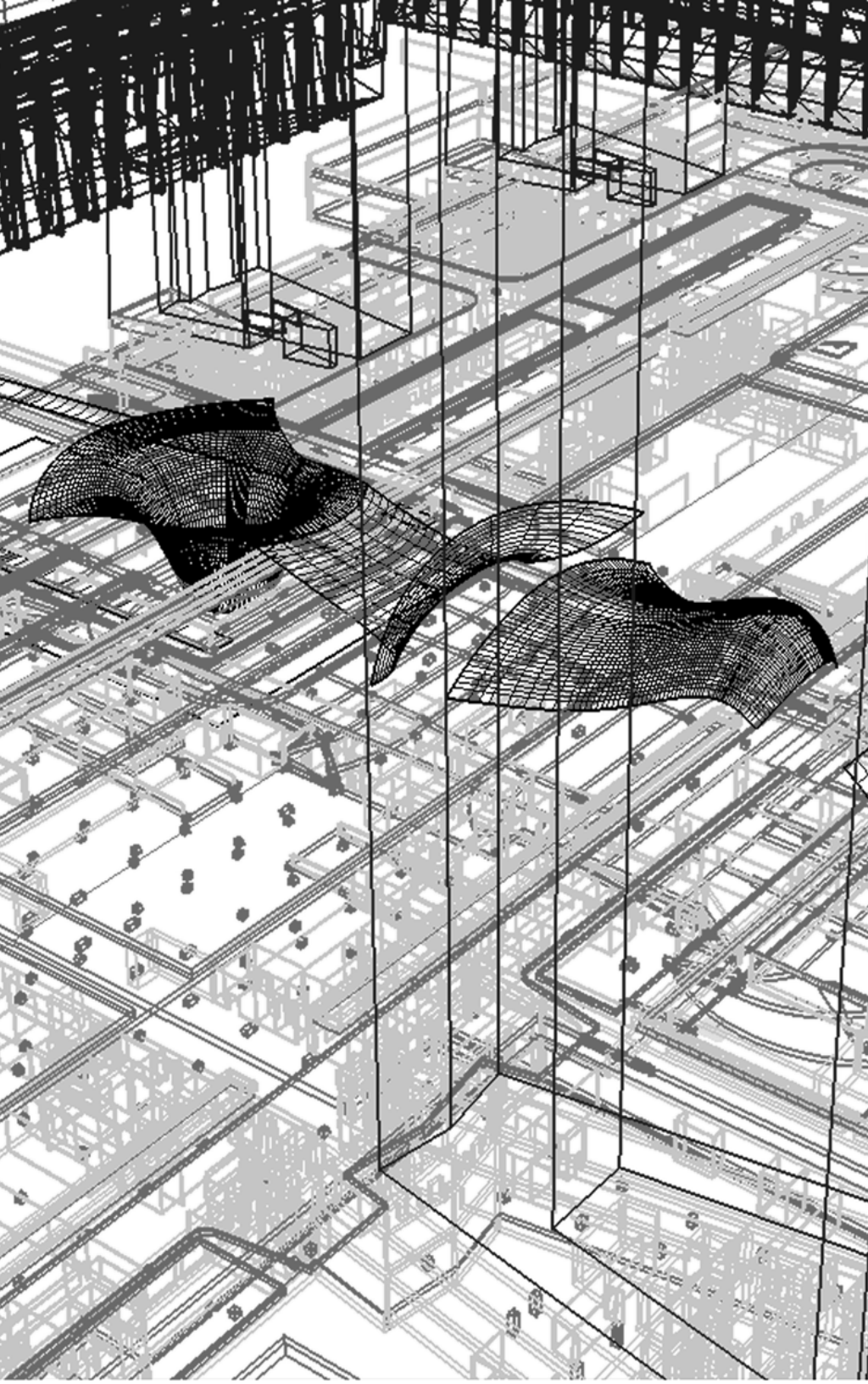




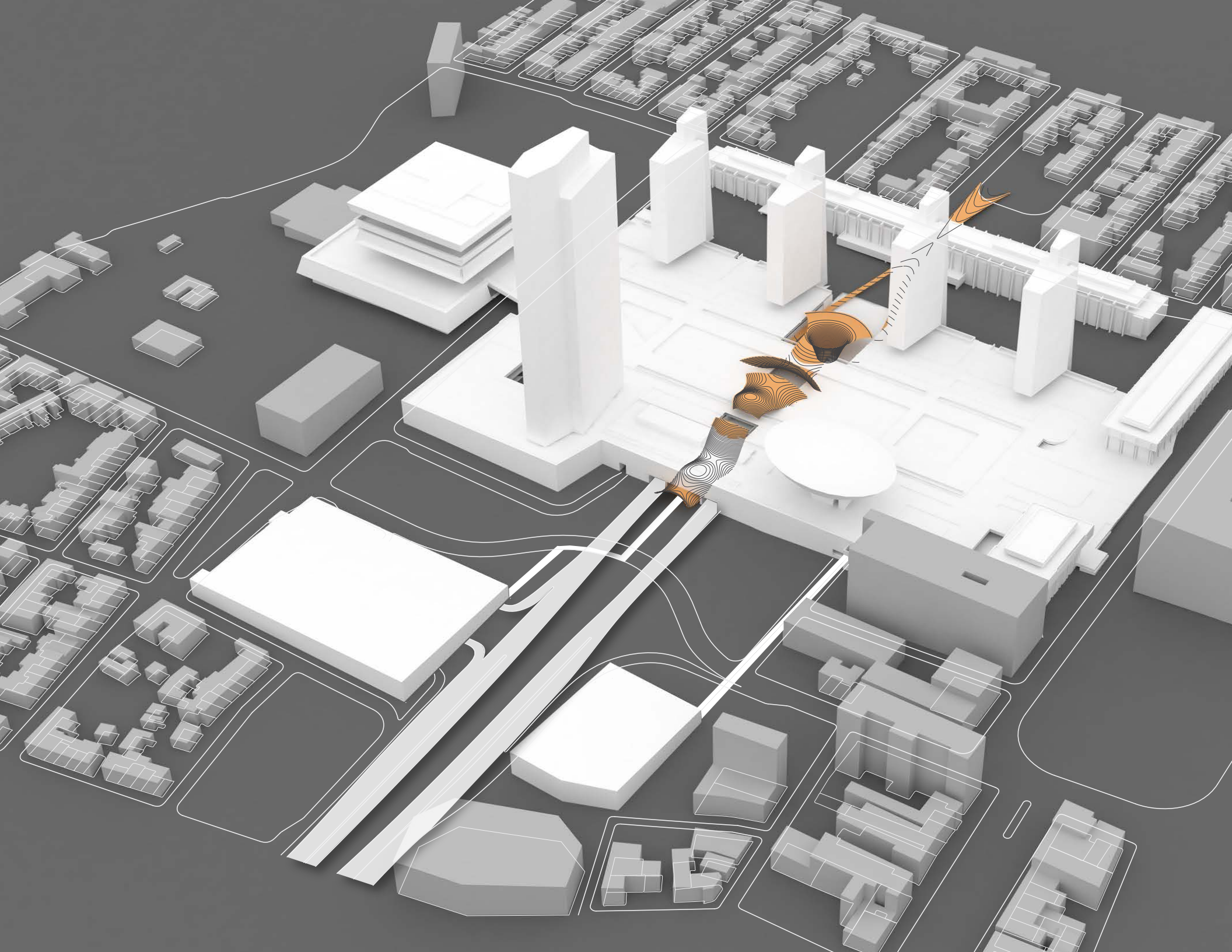
DESIGN SCHEMES: *Additive*

Initial introduction of discontinuous continuous surface. The discontinuity exists to accommodate existing pedestrian circulation inside the plaza.



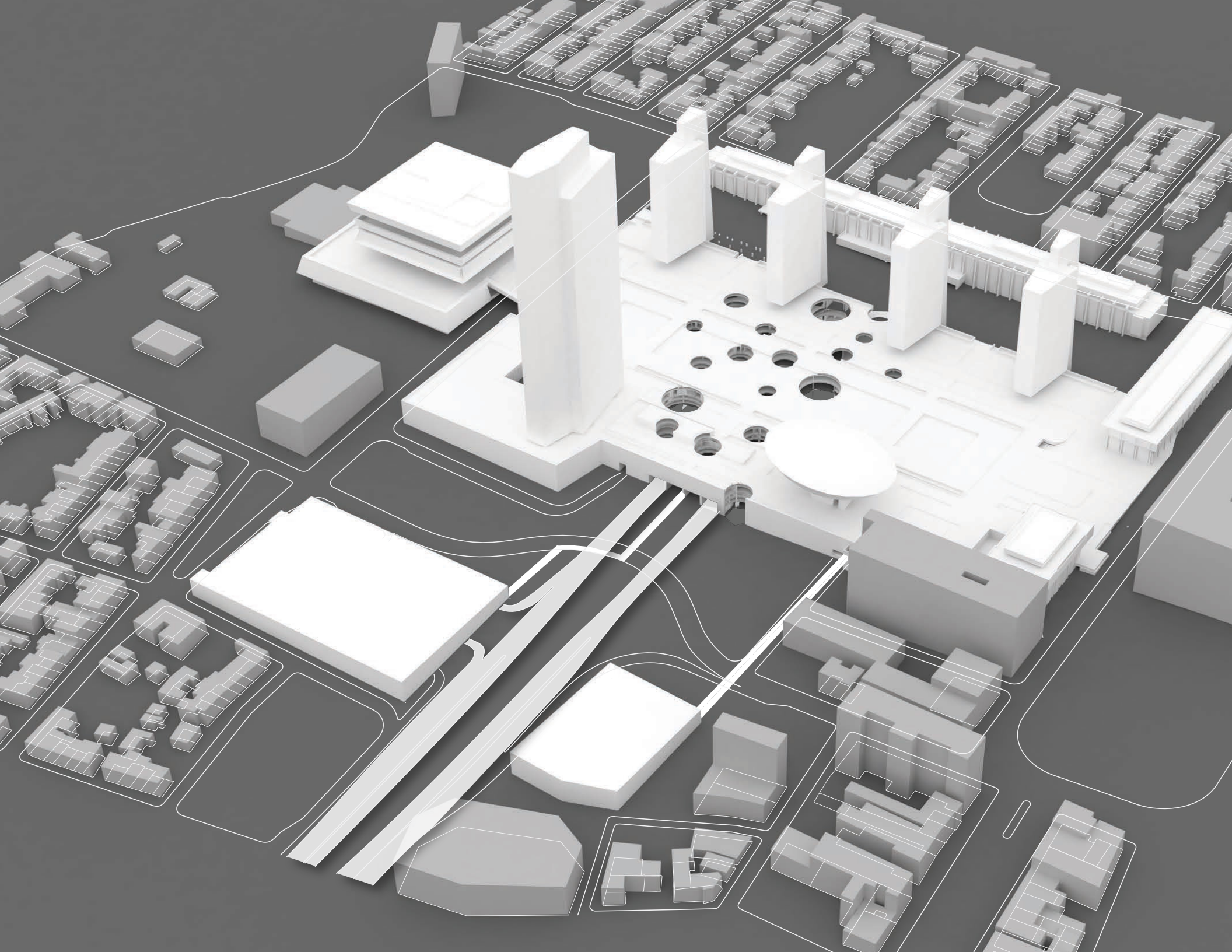


DESIGN SCHEMES: *Additive*



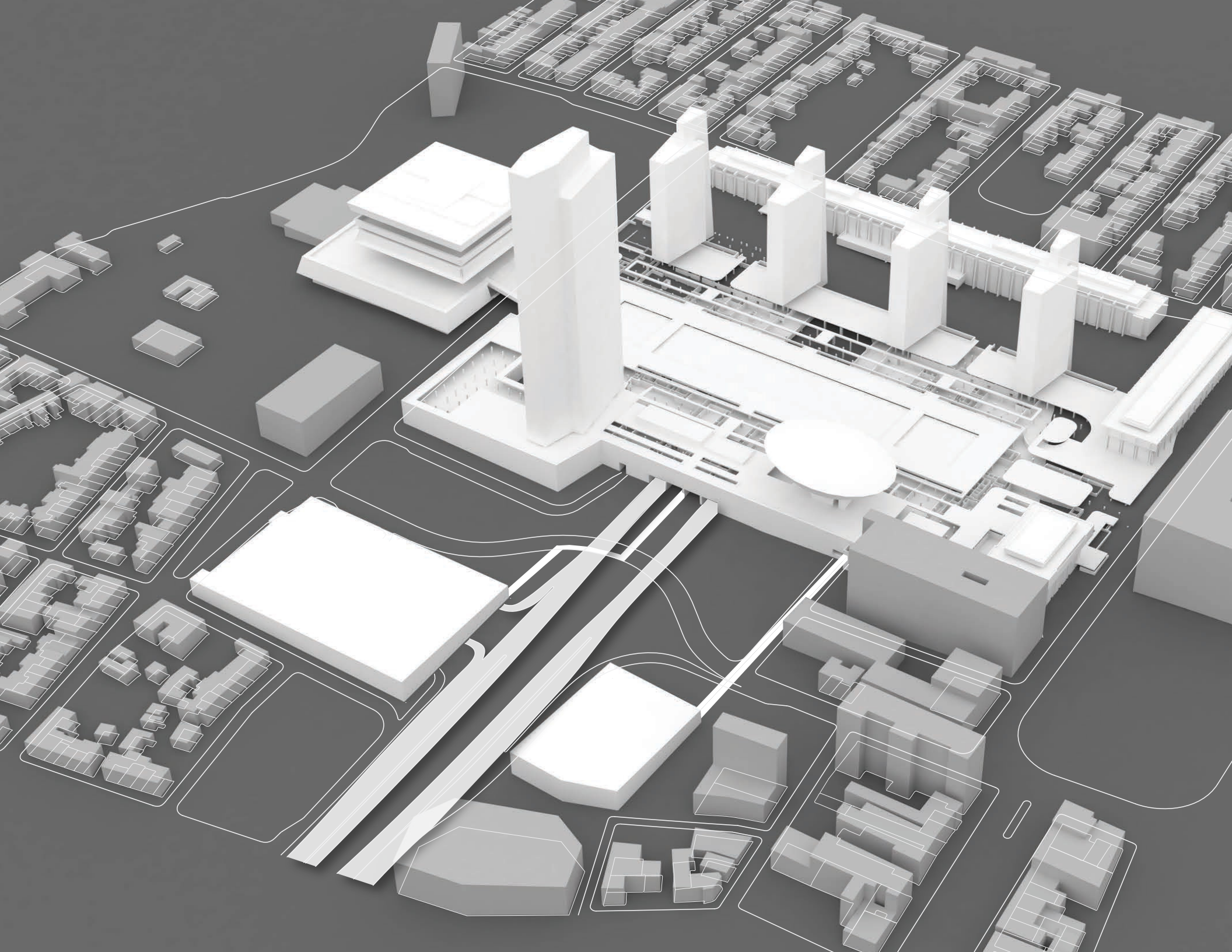
DESIGN SCHEMES: *Subtractive*

The Empire State Plaza is not an underground condition yet the lack of light suggests otherwise. Several light wells are proposed to solve that problem.



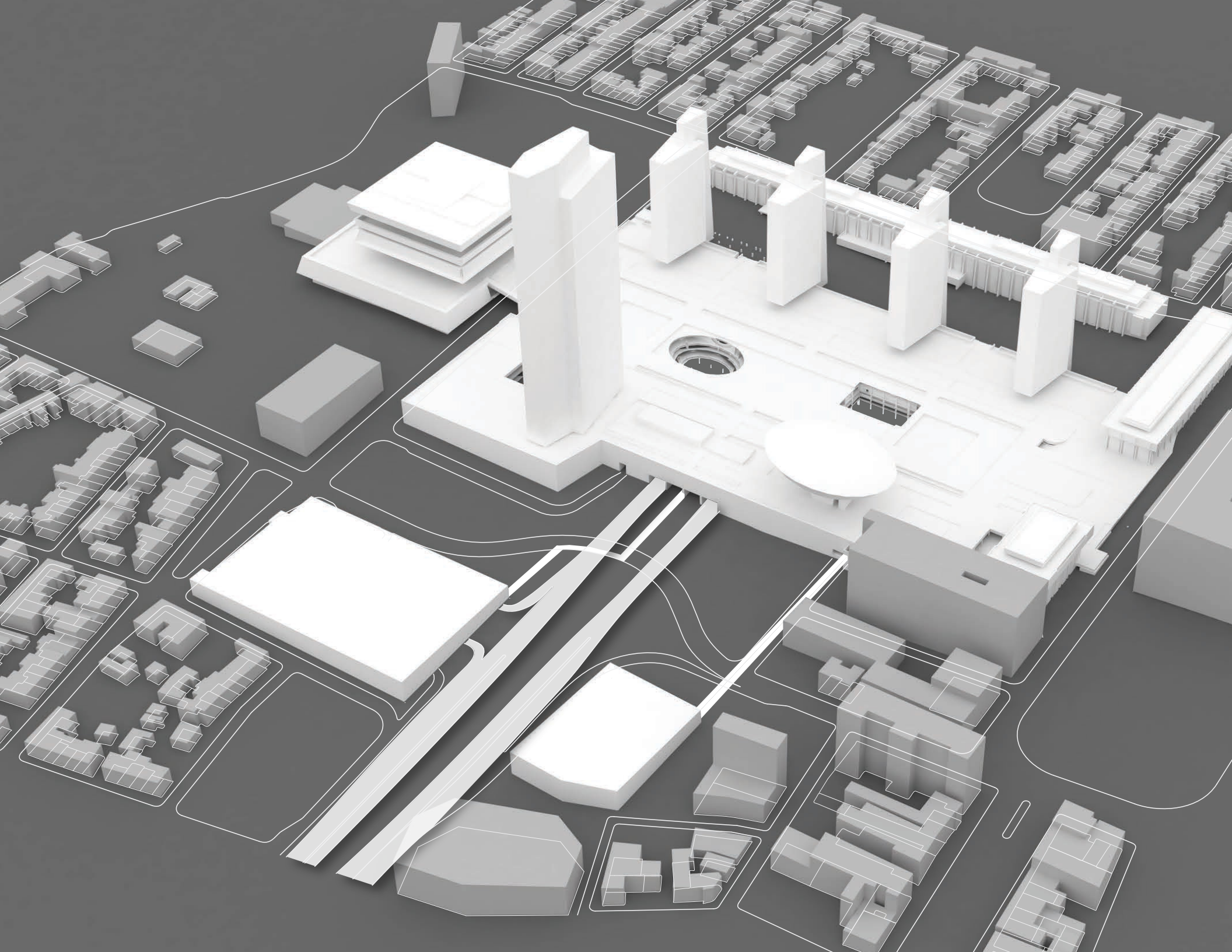
DESIGN SCHEMES: *Subtractive*

Currently public only has narrow sidewalks which they can freely access. In the diagram service roads and restricted grass areas, from the plaza level, have been taken out to show the limited public interaction.



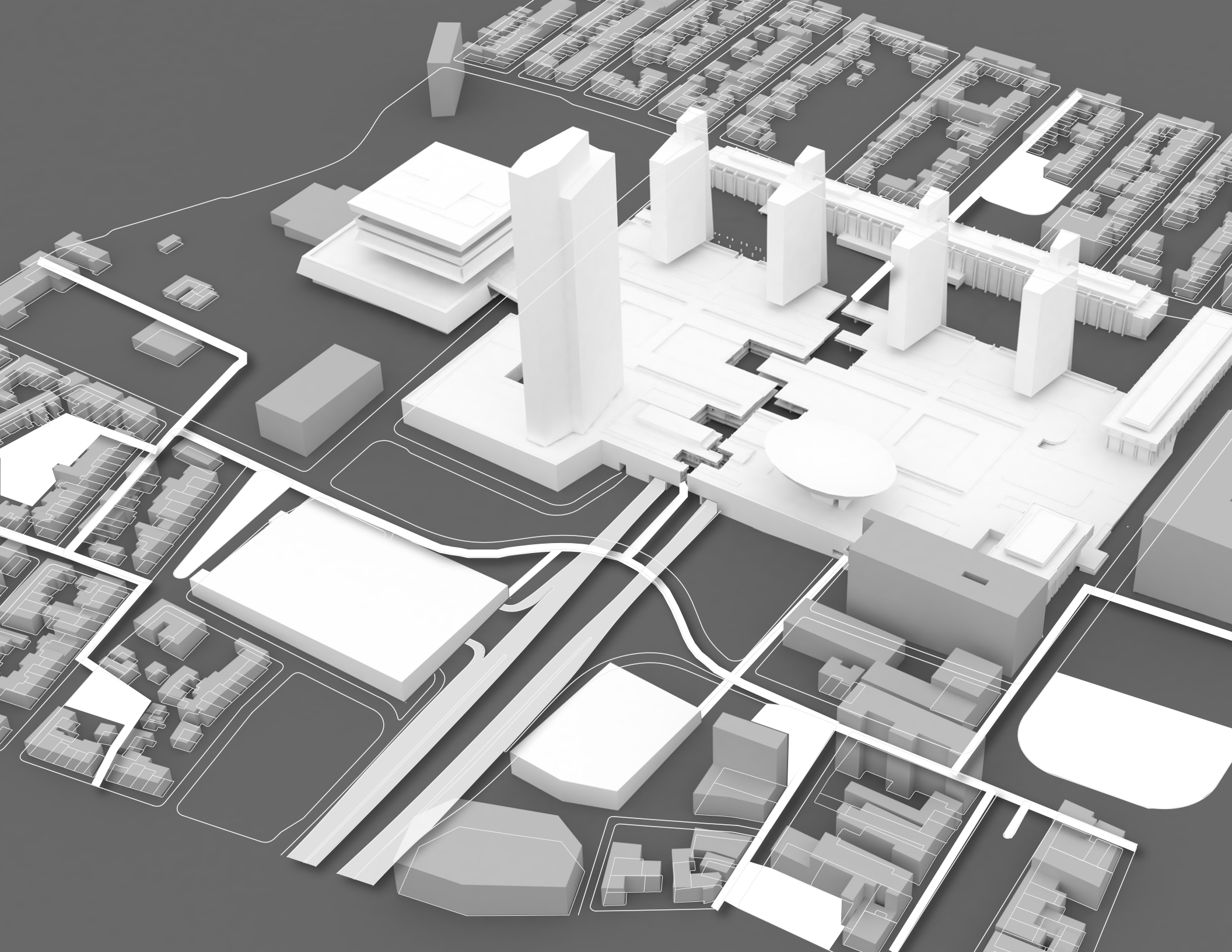
DESIGN SCHEMES: *Subtractive*

Larger proposed public programs, amphitheater and basketball court, can be inserted as a negative space within the existing field-condition of the column grid.



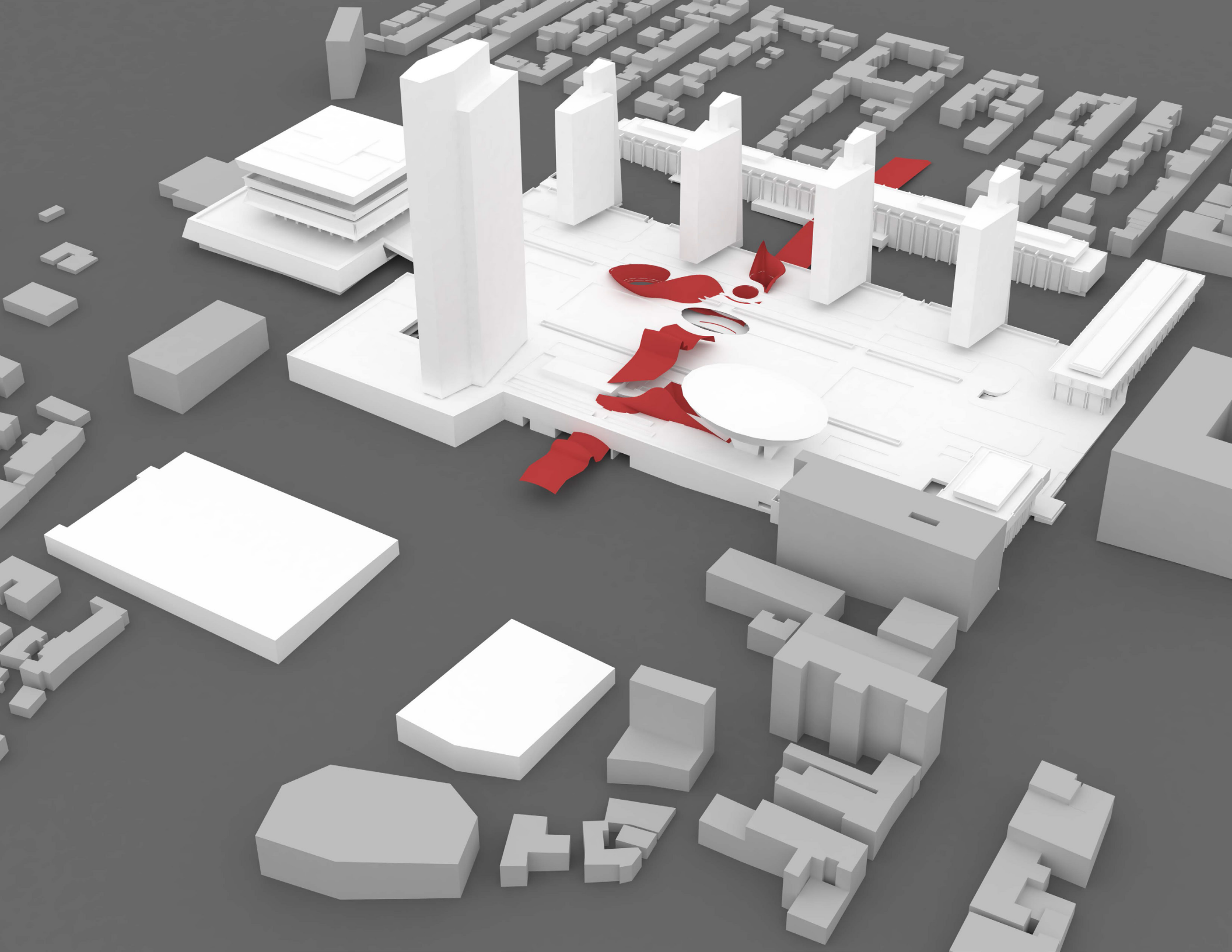
DESIGN SCHEMES: *Subtractive*

Linking the cut to the network of other public spaces around the plaza. The cut can expand or constrict depending on existing conditions of the plaza and need for proposed programatic elements

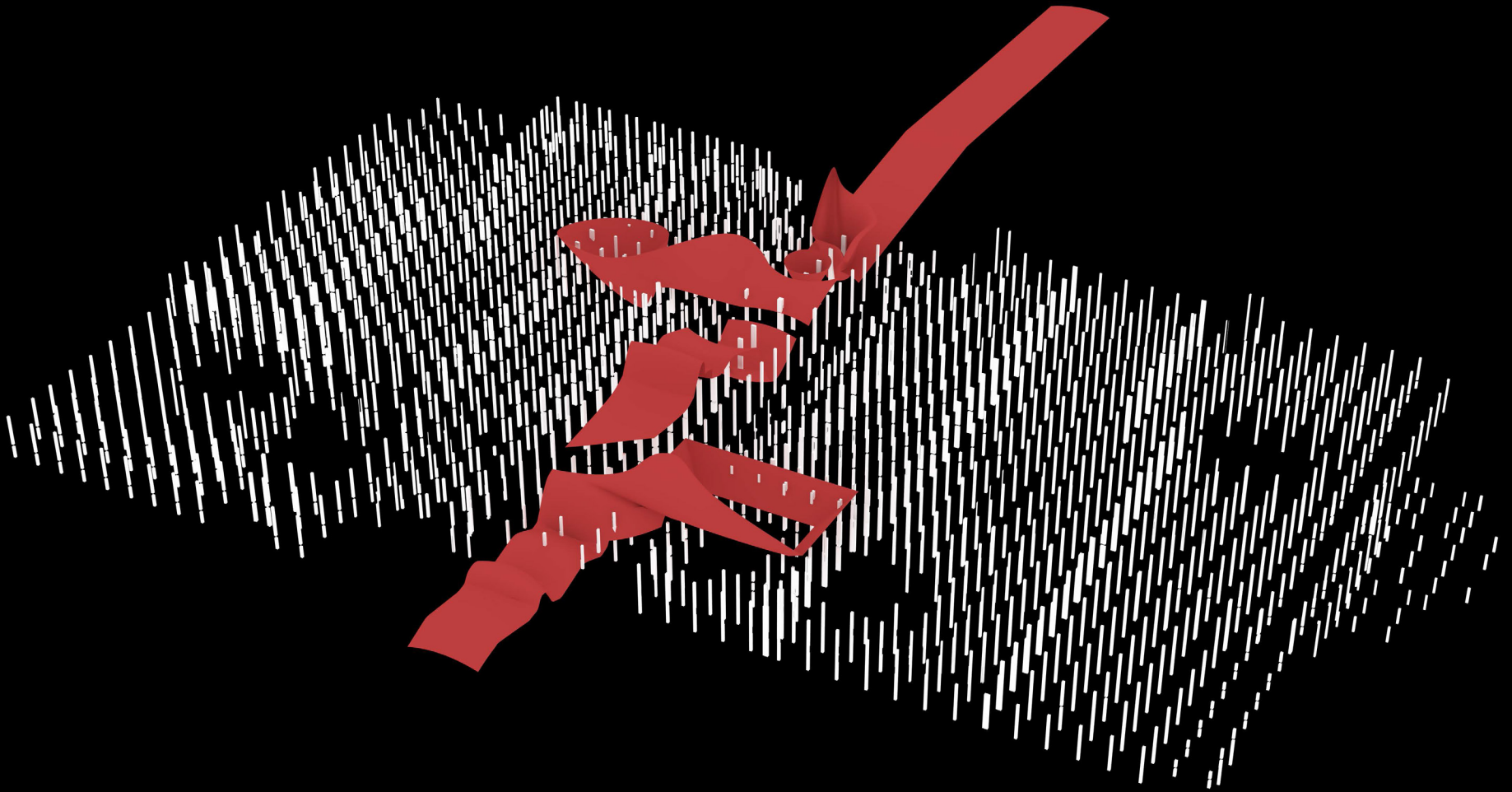


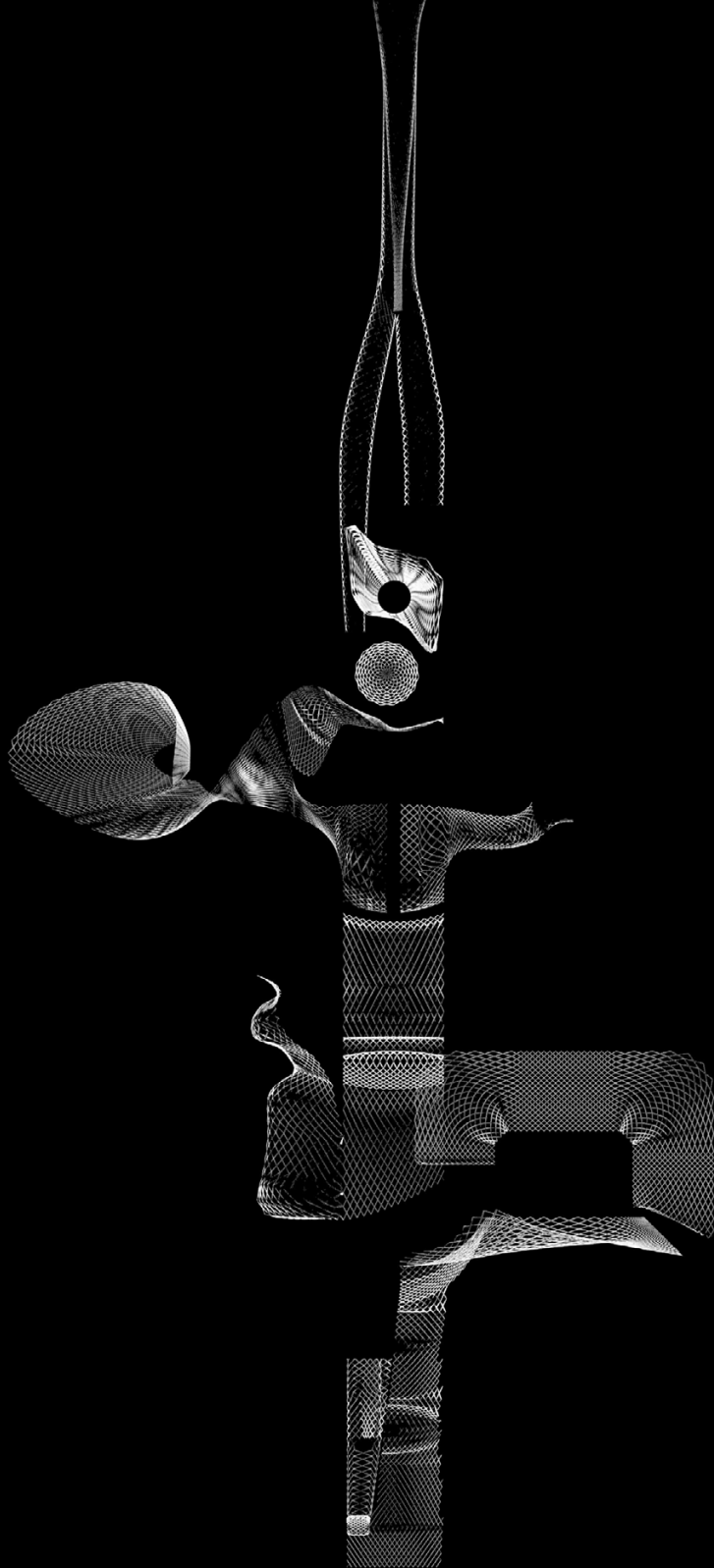
DESIGN SCHEMES: *Additive & Subtractive*

One of the first variations where Subtractive elements and additive surface work together to achieve multiplicity of function





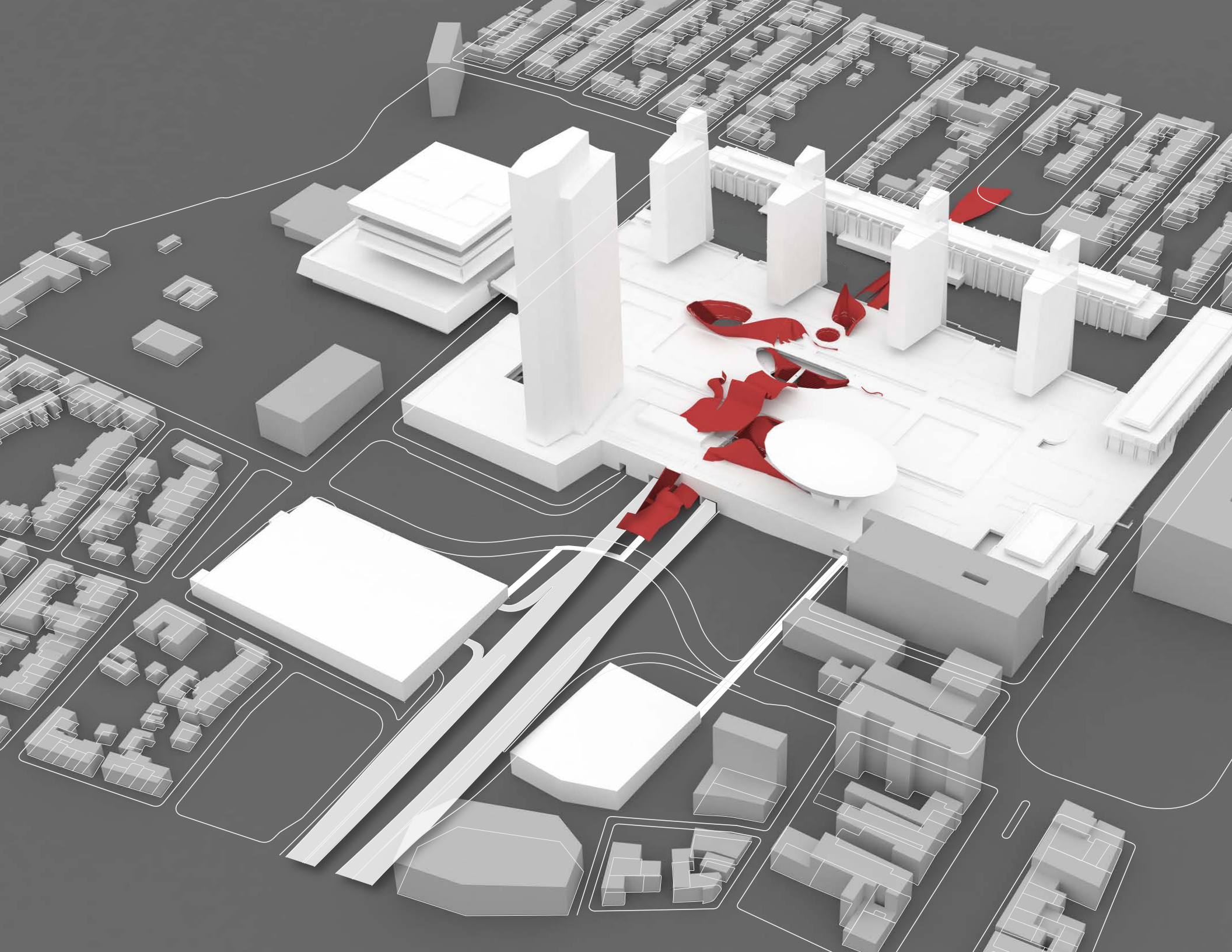


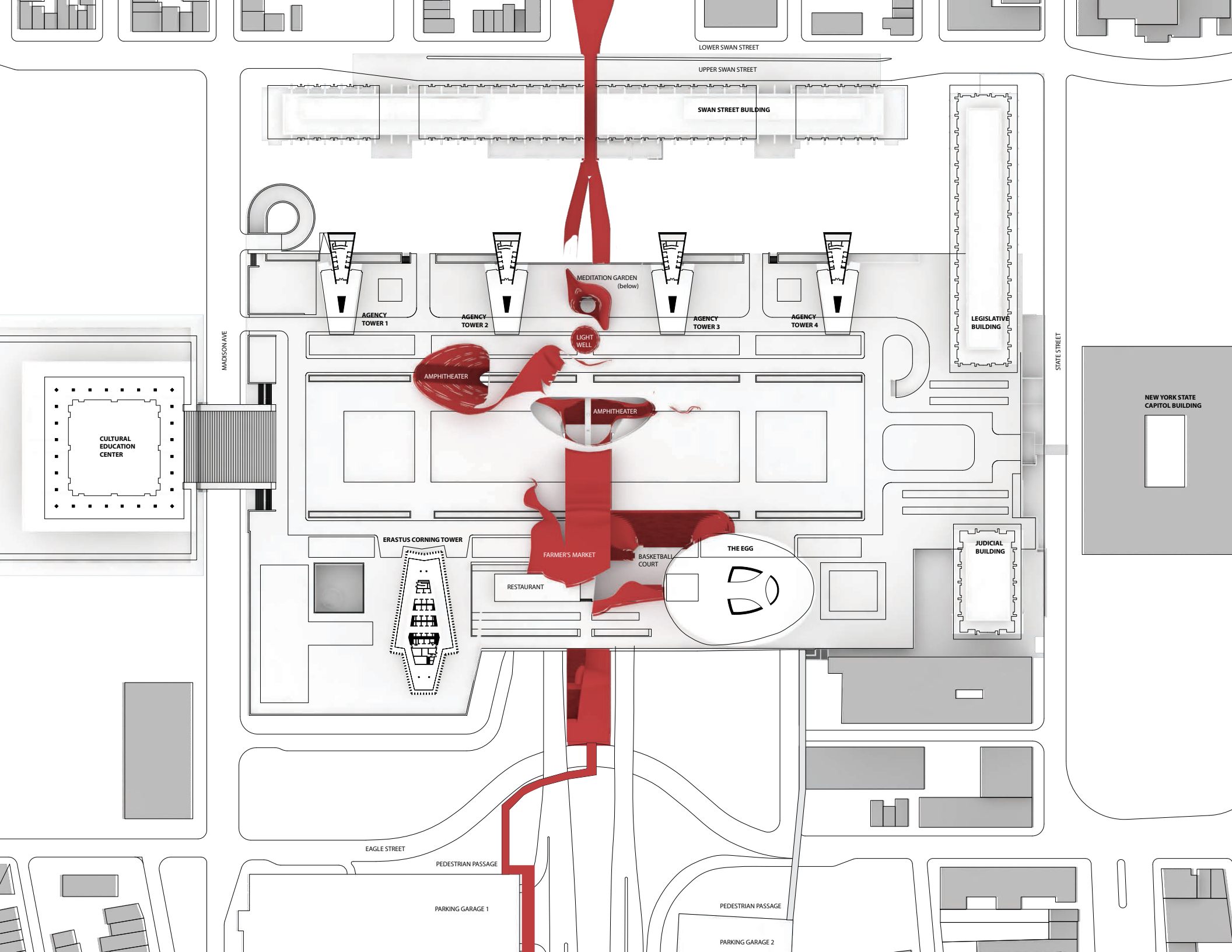


FINAL SCHEME: *Additive & Subtractive*

Formally the project creates discontinuity with in a continuous surface to achieve multiplicity of function. The form is then tested at the Empire State Plaza where public space merely exists as a walk-in-a-park. The discontinuous continuous surface reclaims and redefines public realm by introducing public programs and thickening of such programs within the different layers of the plaza.

Various public programs include: amphitheaters, market, and basketball/tennis court. The surface and the cuts also open up new access routes for pedestrians, further opening up the plaza. The existing circulation and program of the plaza is maintained





LOWER SWAN STREET

UPPER SWAN STREET

SWAN STREET BUILDING

AGENCY
TOWER 1

AGENCY
TOWER 2

AGENCY
TOWER 3

AGENCY
TOWER 4

LEGISLATIVE
BUILDING

MEDITATION GARDEN
(below)

LIGHT
WELL

AMPHITHEATER

AMPHITHEATER

ERASTUS CORNING TOWER

RESTAURANT

BASKETBALL
COURT

FARMER'S MARKET

THE EGG

JUDICIAL
BUILDING

NEW YORK STATE
CAPITOL BUILDING

CULTURAL
EDUCATION
CENTER

MADISON AVE

STATE STREET

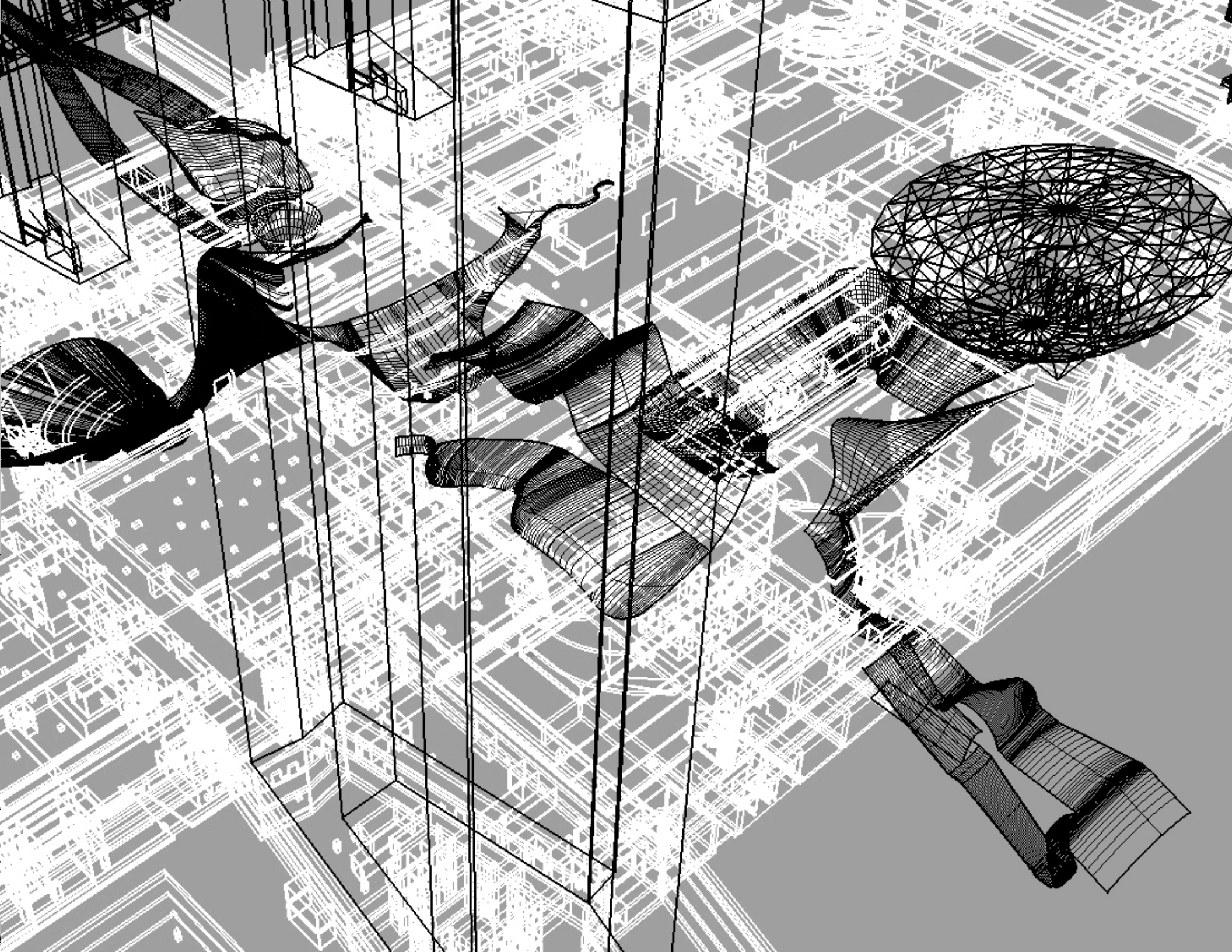
EAGLE STREET

PEDESTRIAN PASSAGE

PARKING GARAGE 1

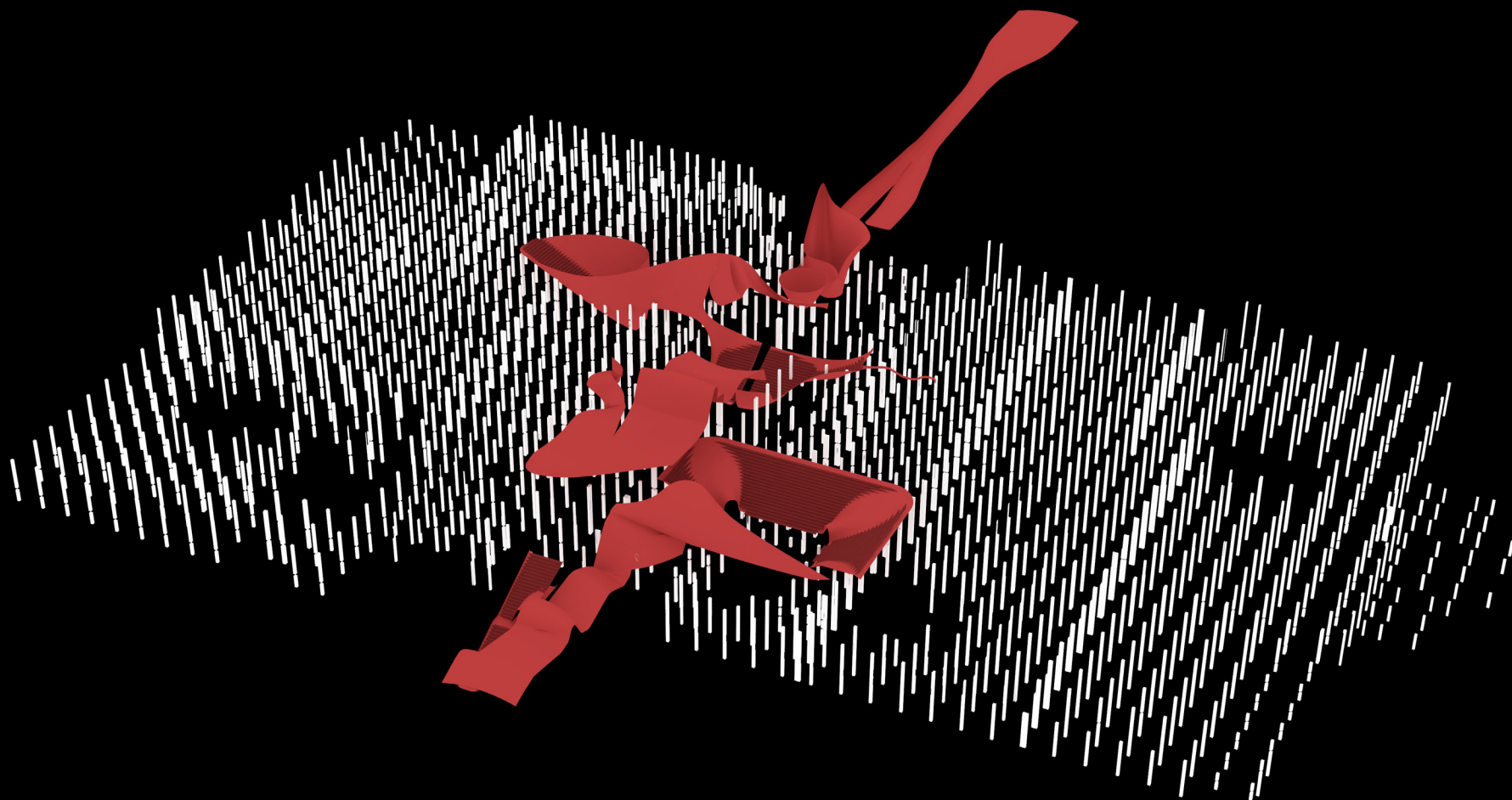
PEDESTRIAN PASSAGE

PARKING GARAGE 2





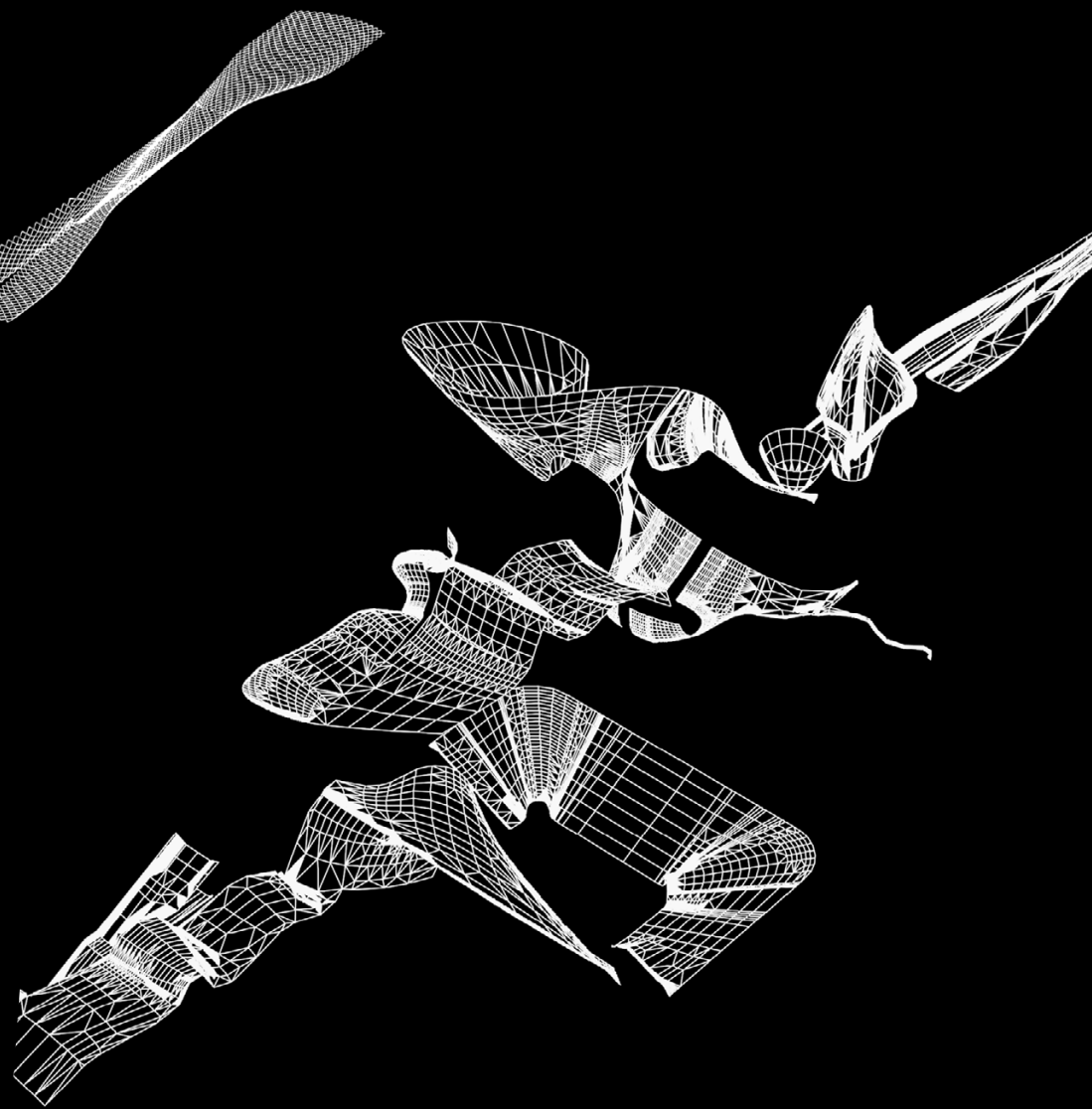
Plan showing added surface and subtractive cuts



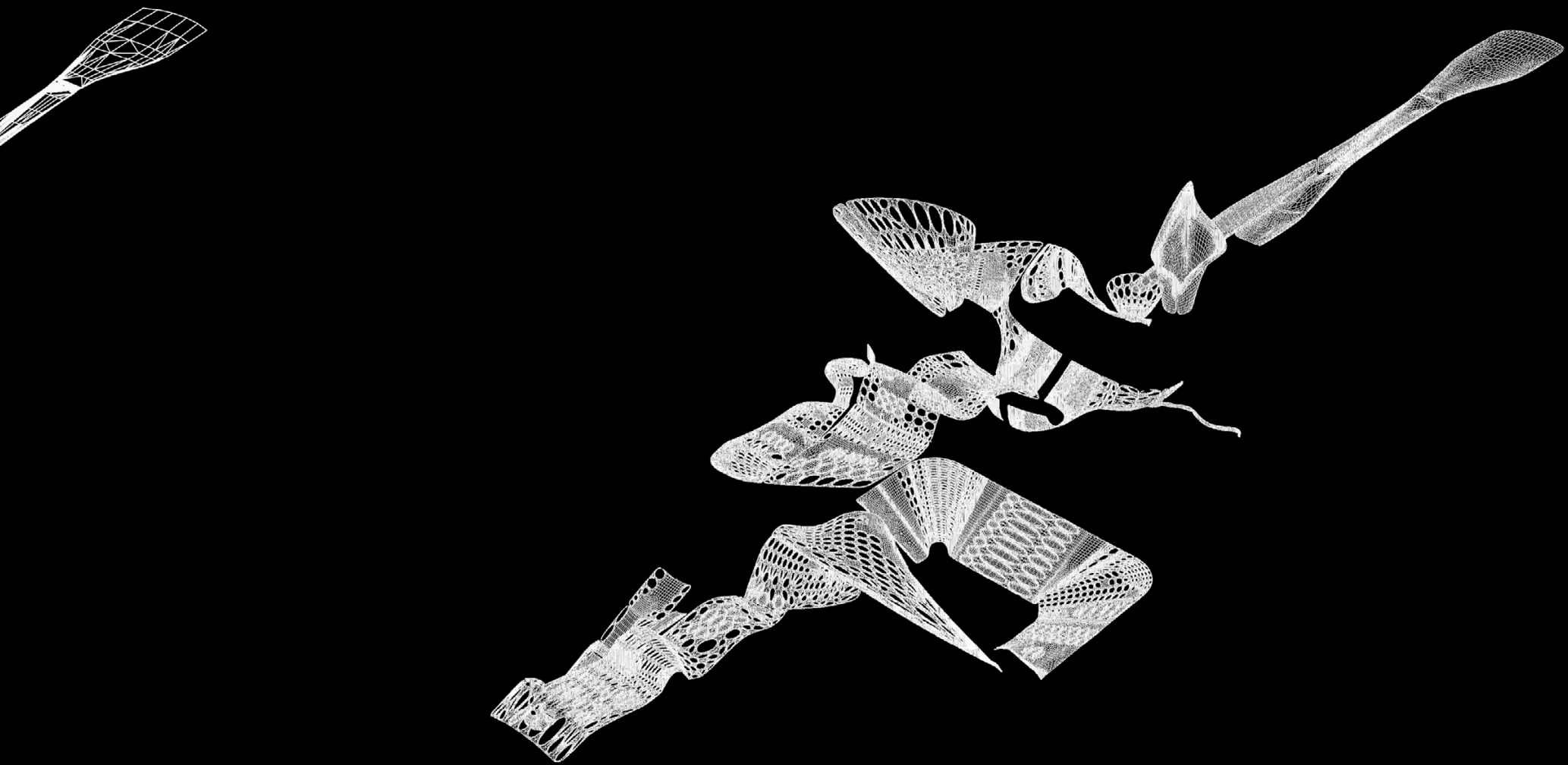
Existing Structural Condition of the plaza & added surface



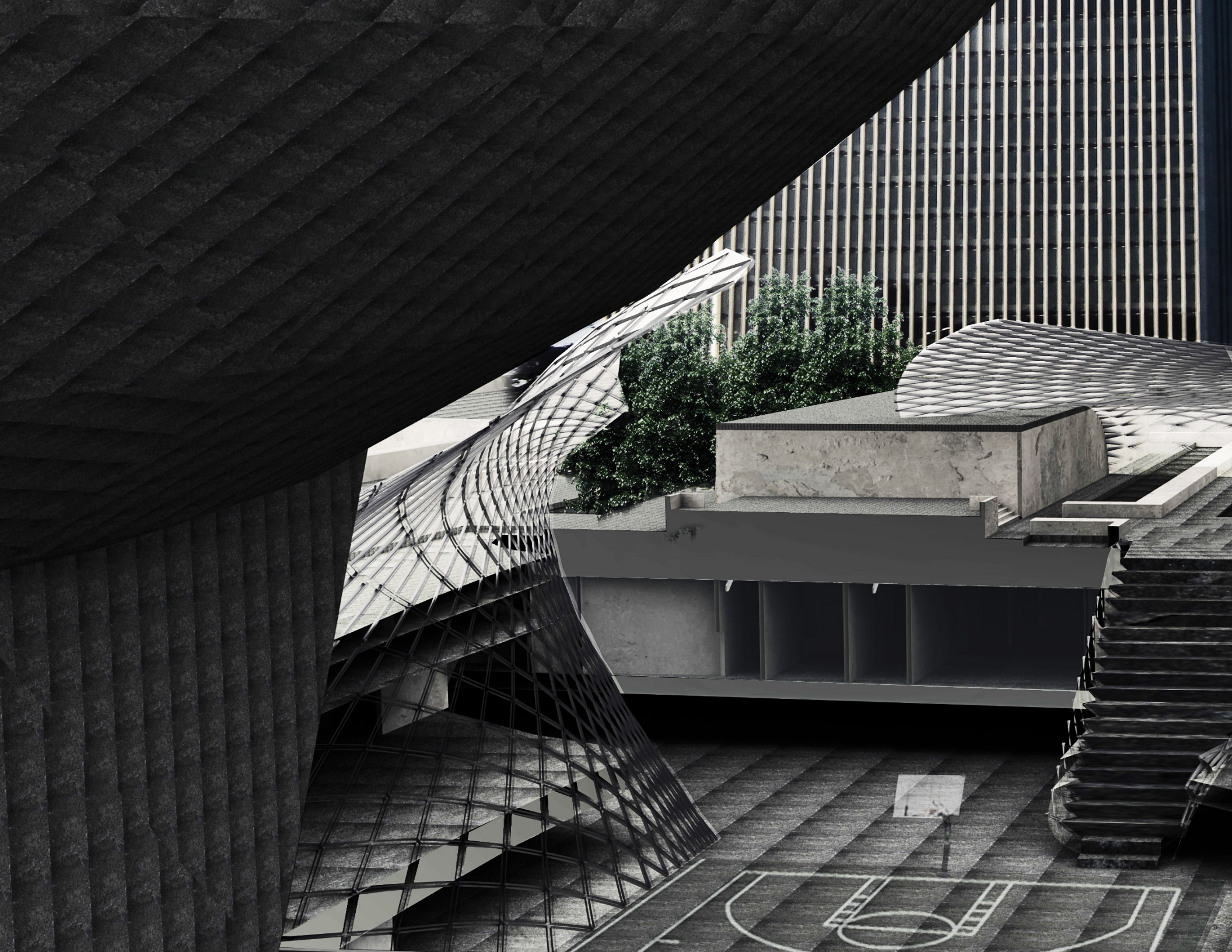
Structural Mesh

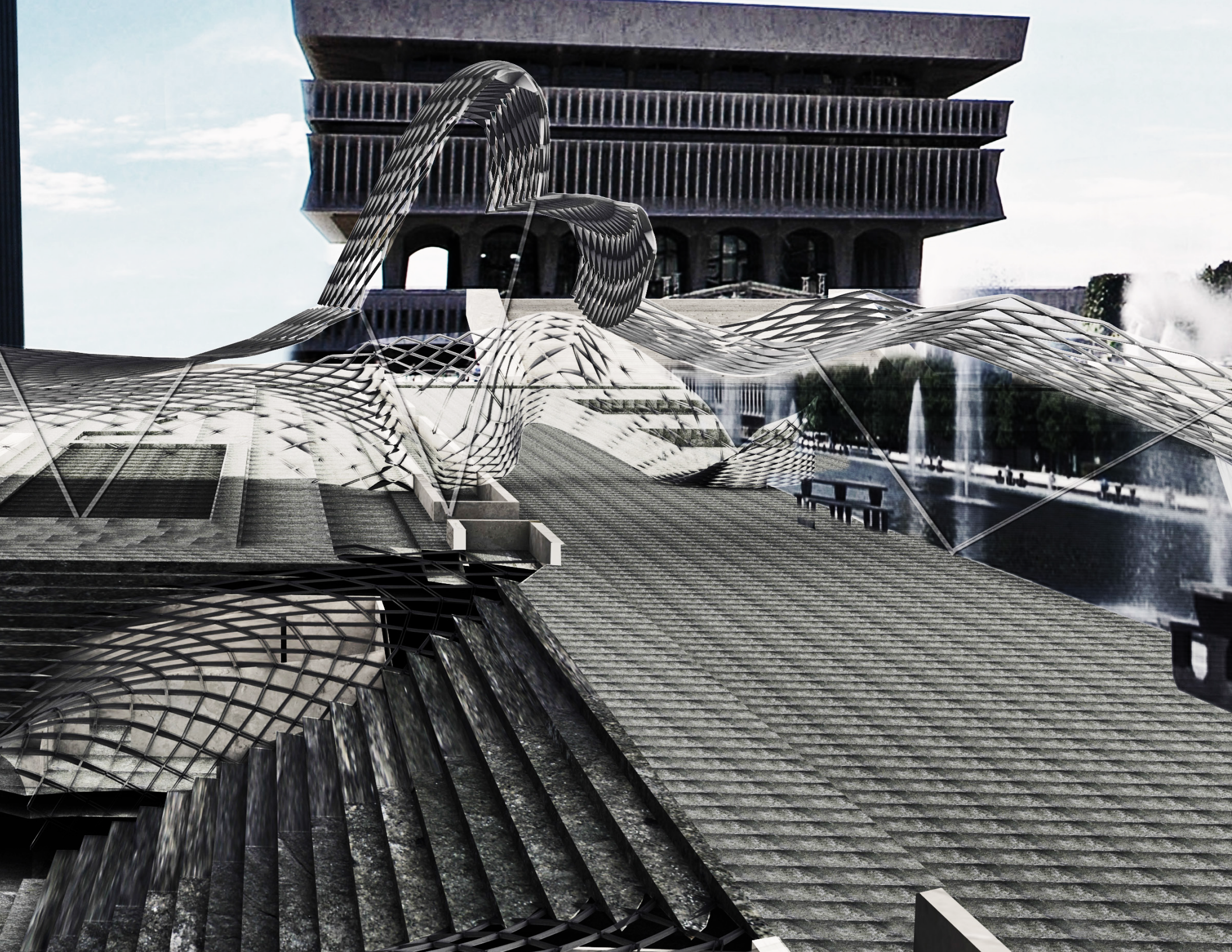


Edited Structural Mesh: Denser at greater load conditions



Projected manipulation of the structural mesh





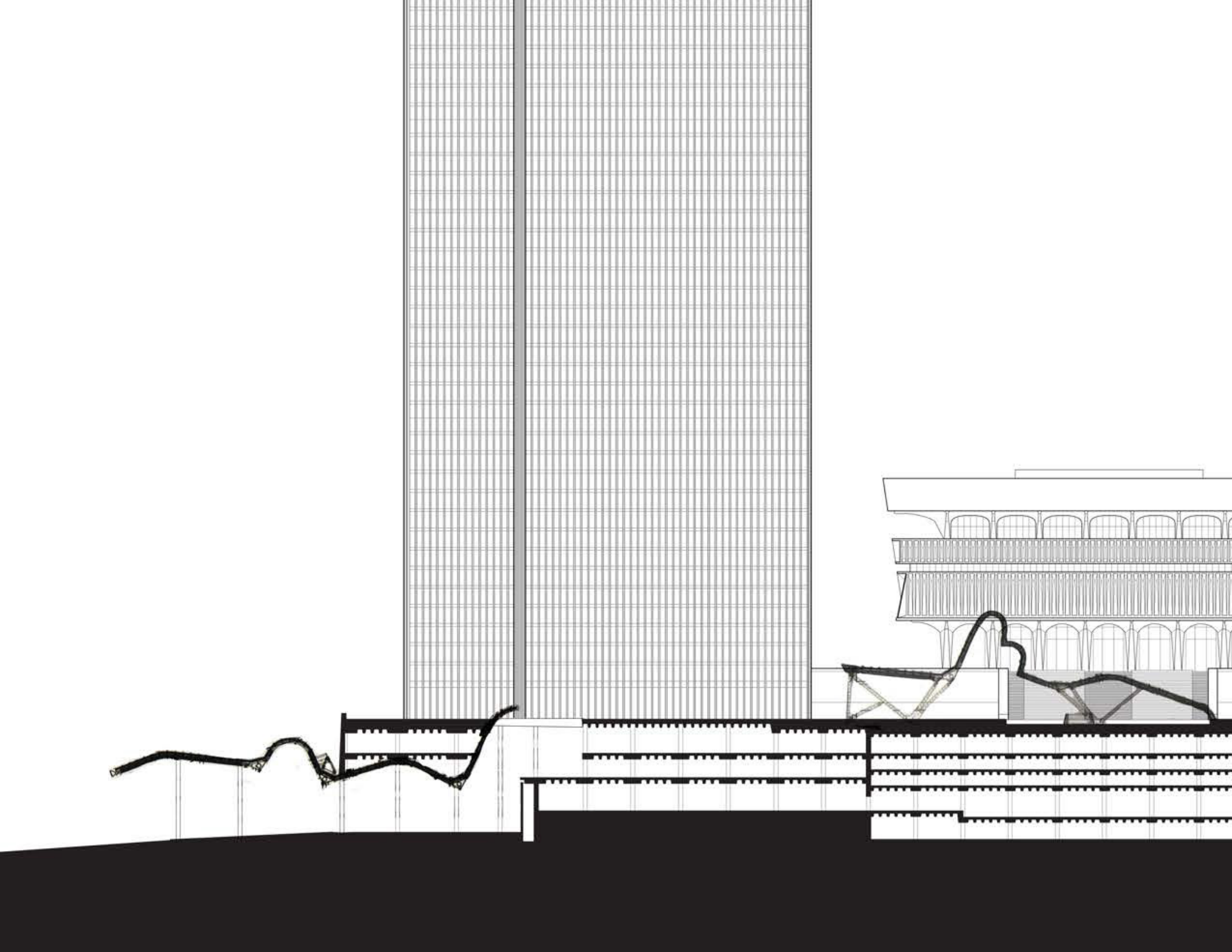
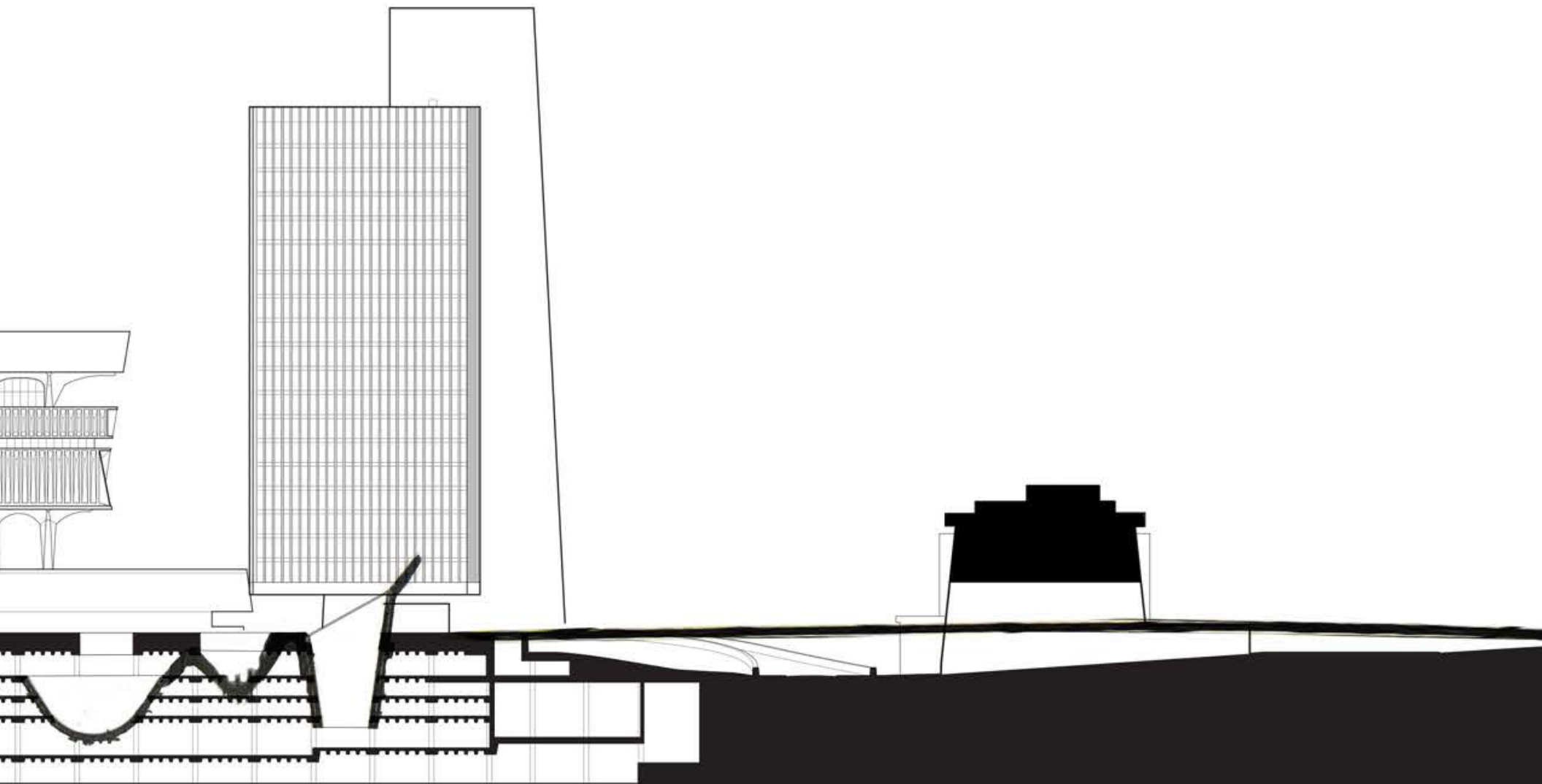
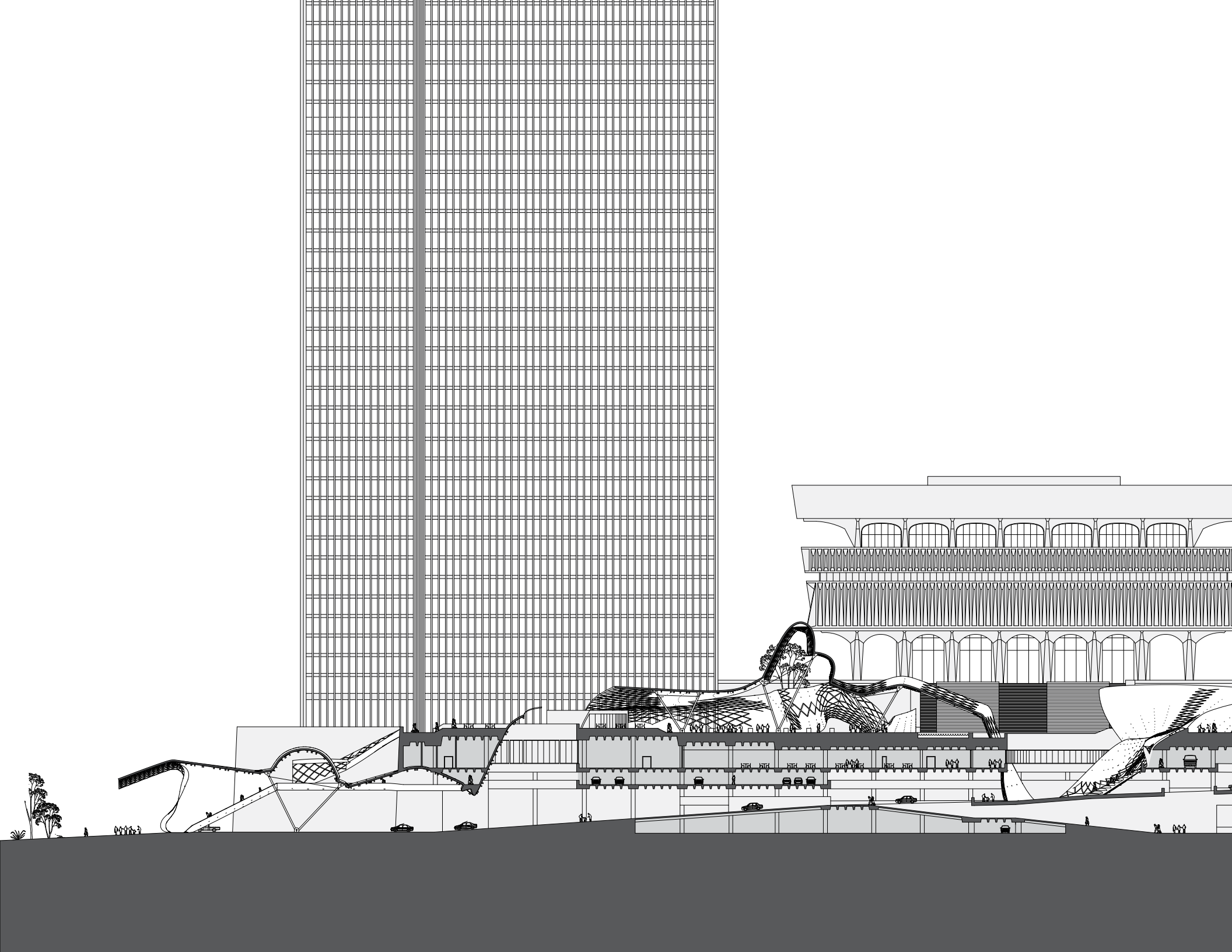
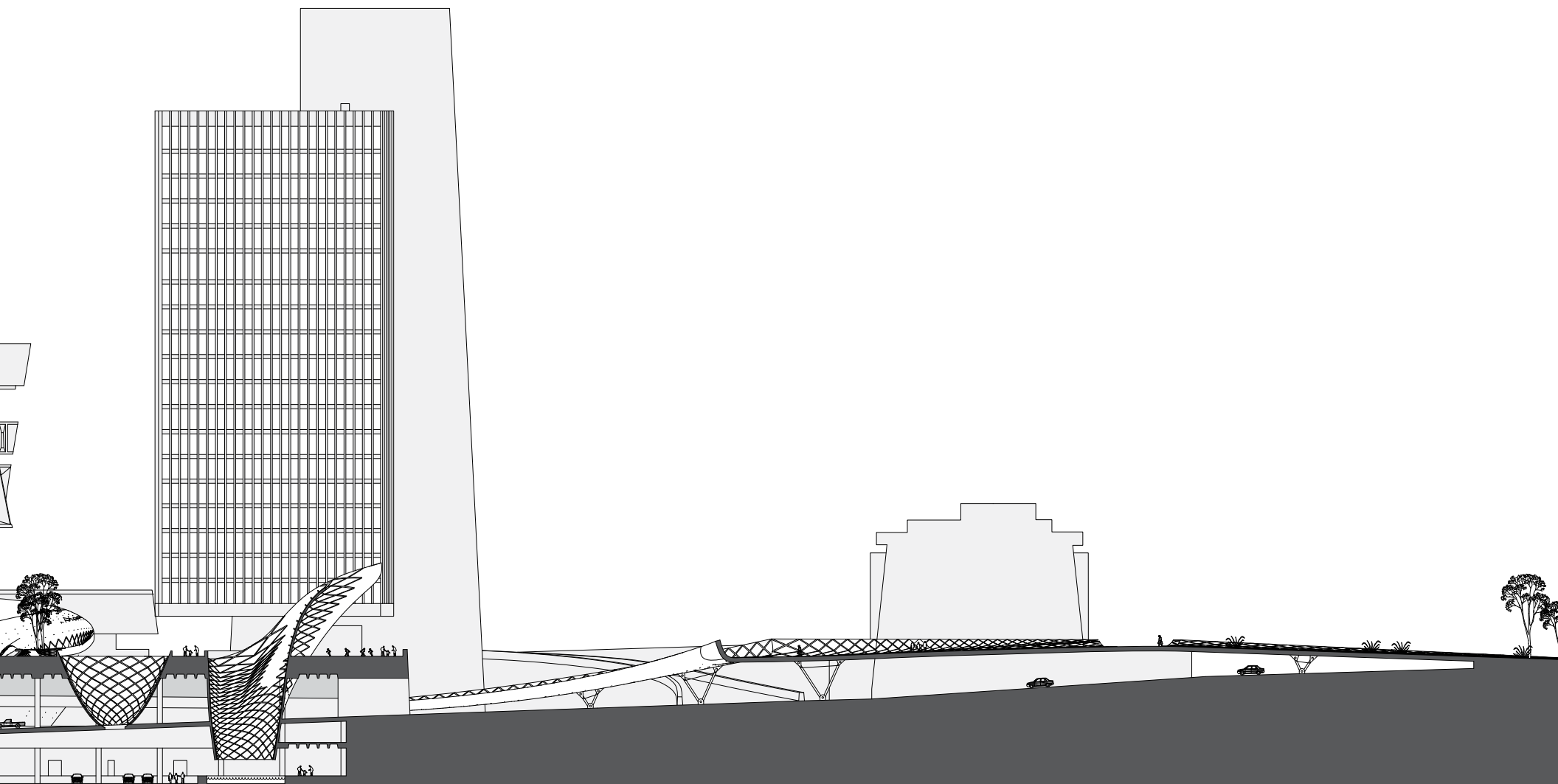


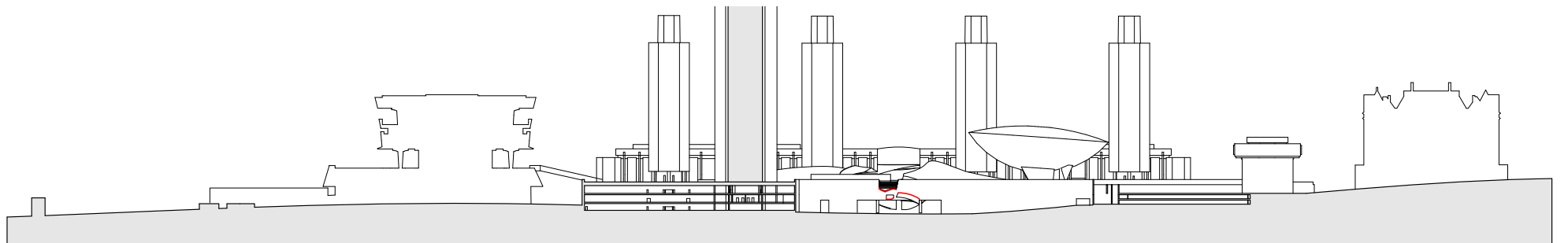
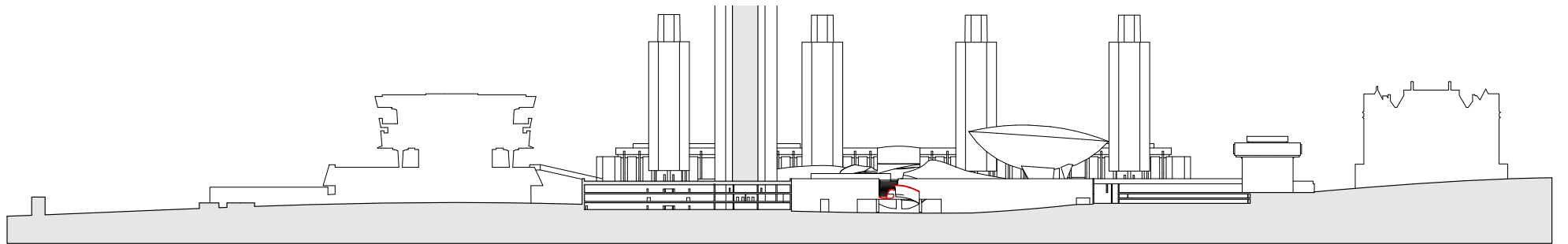
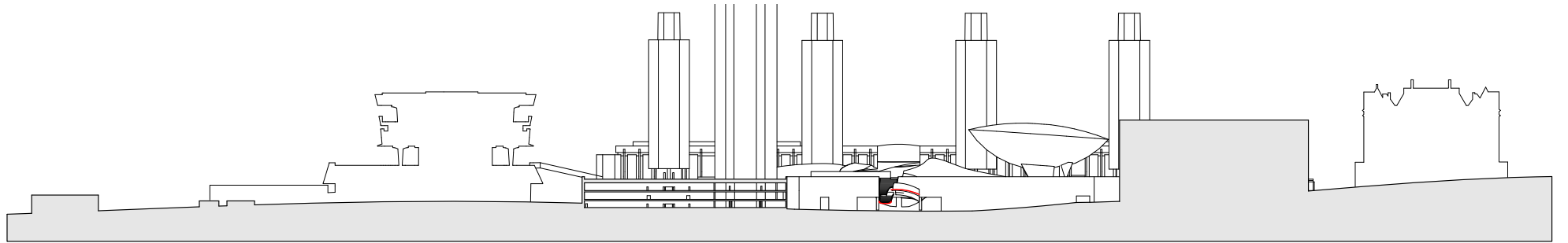
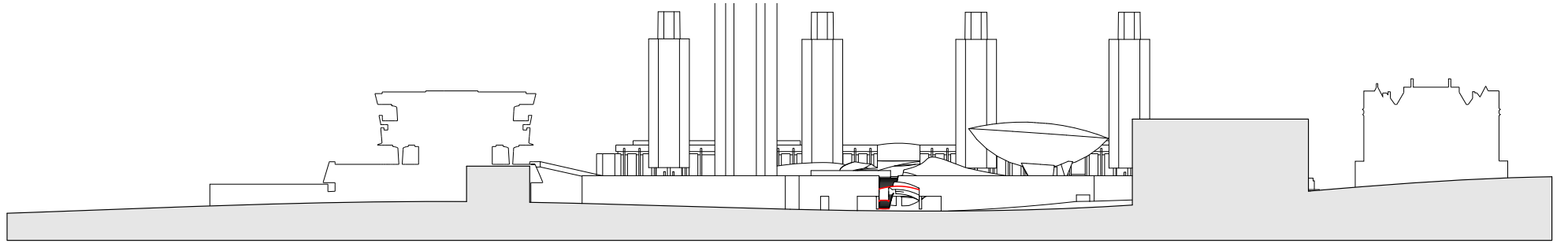
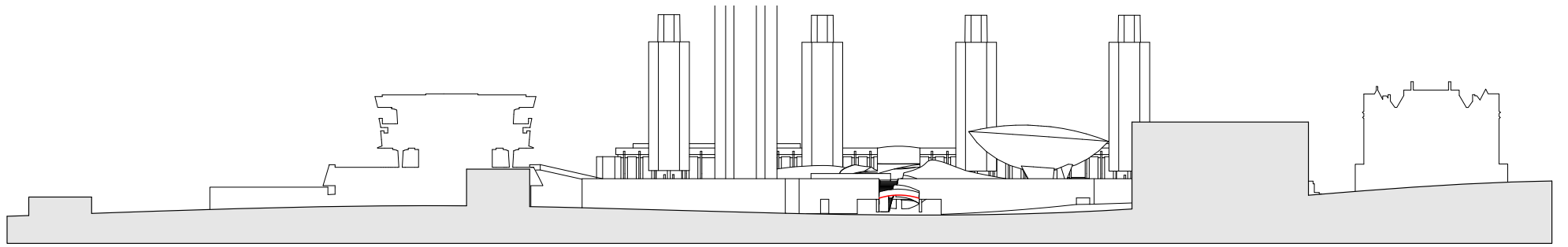
Diagram Cross Section

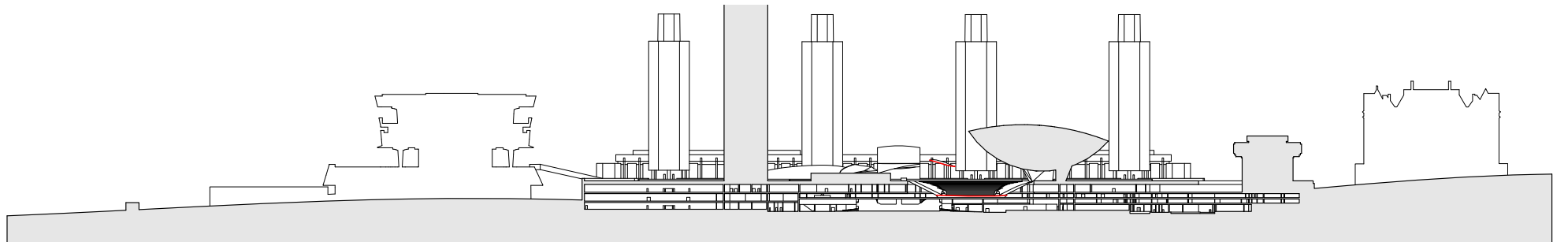
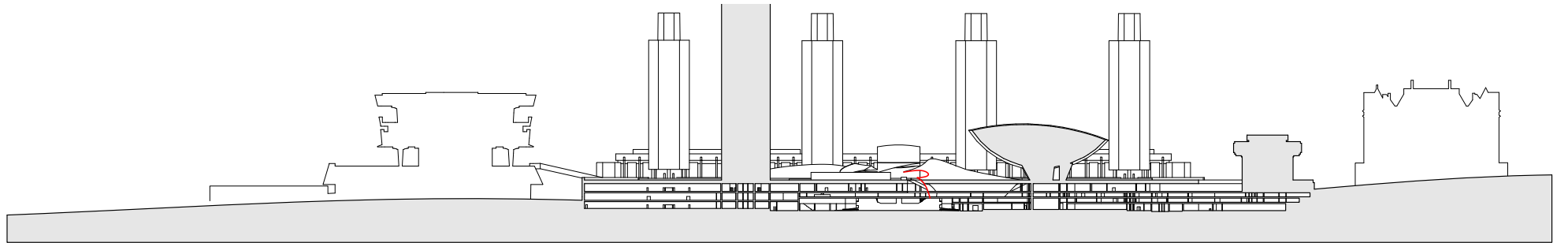
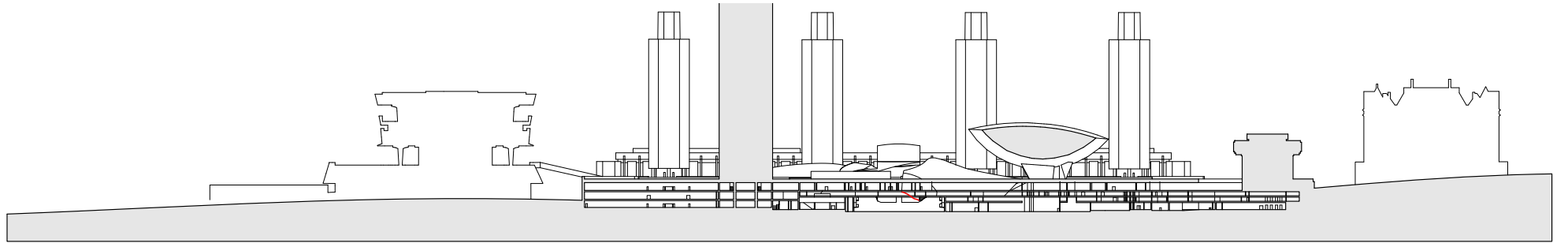
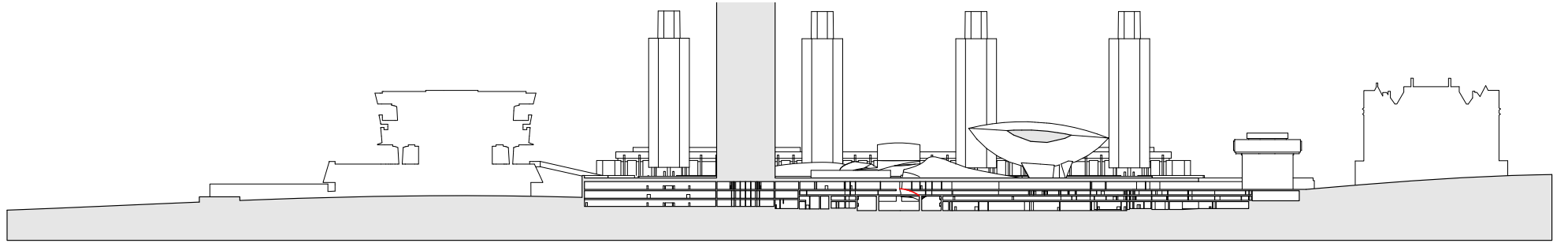
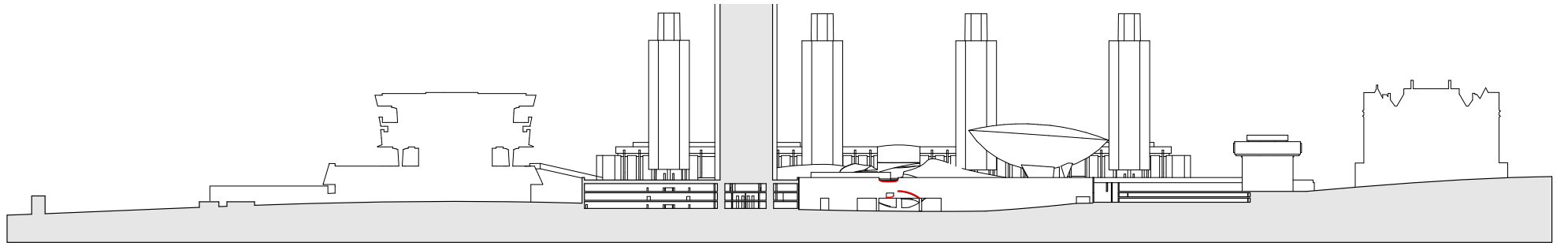


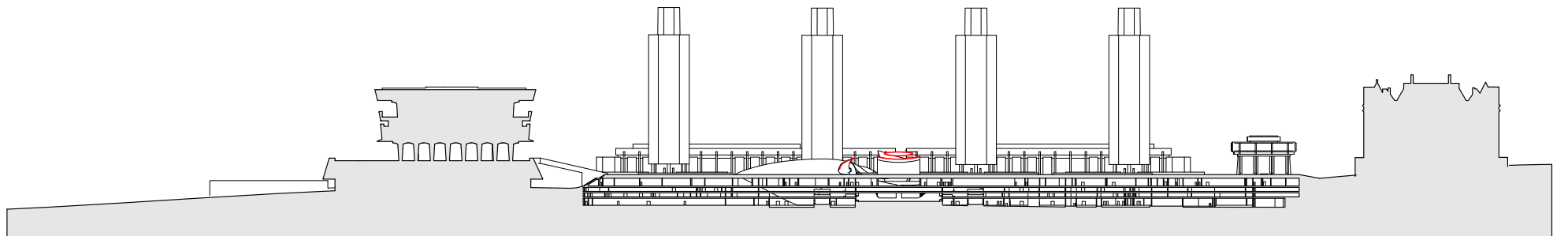
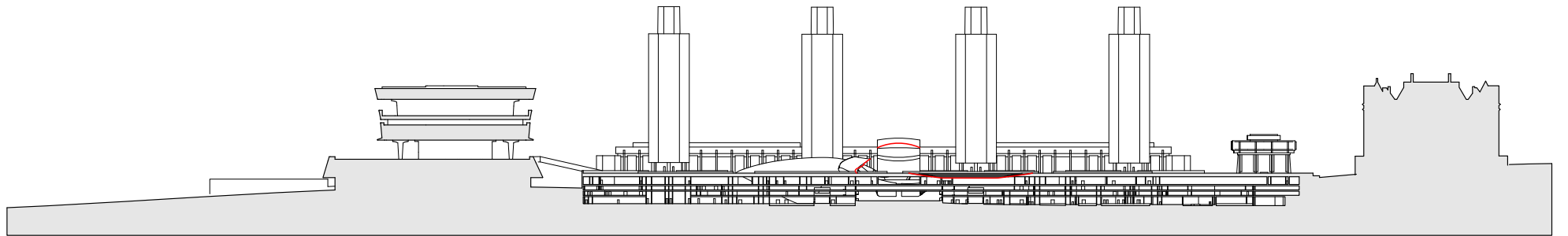
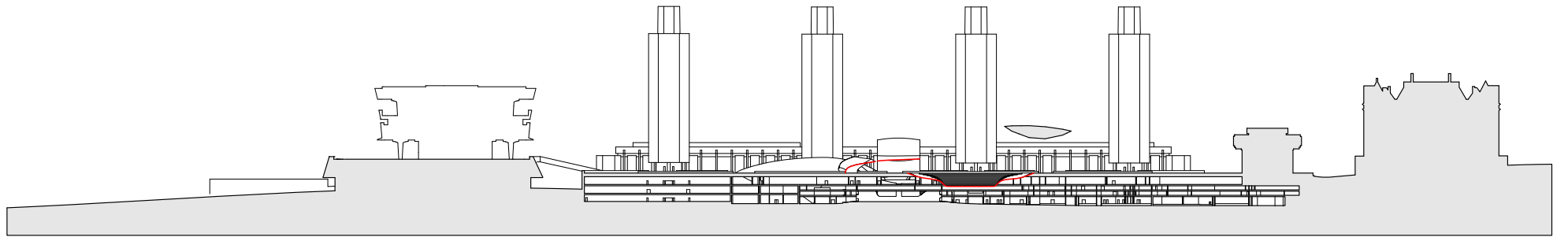
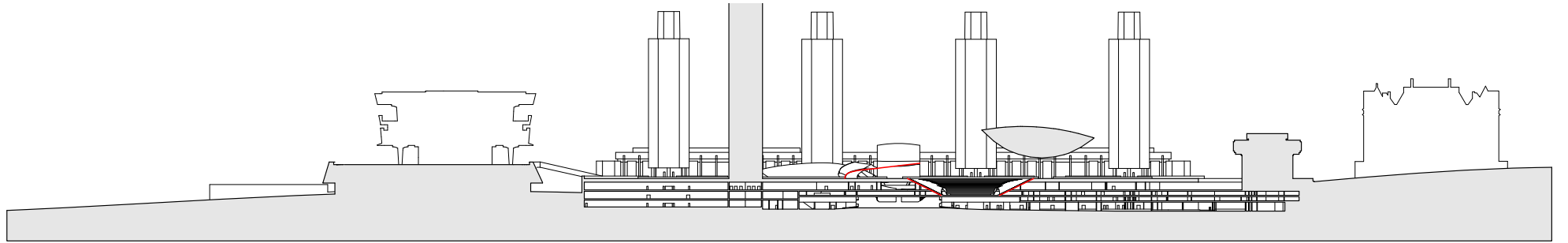
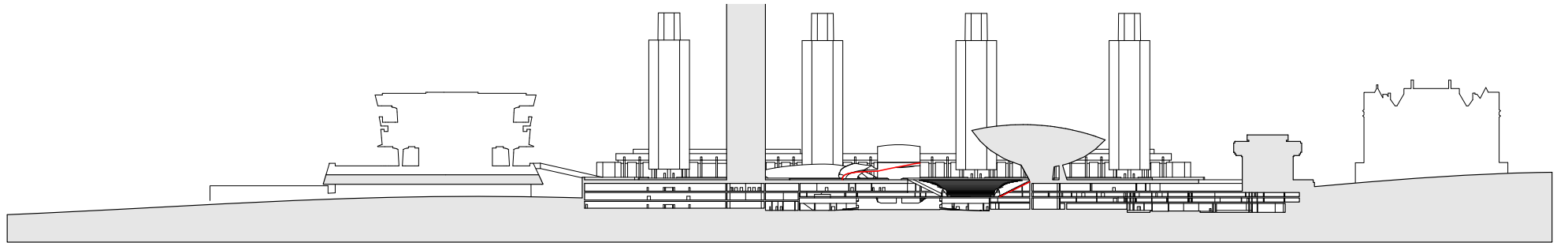


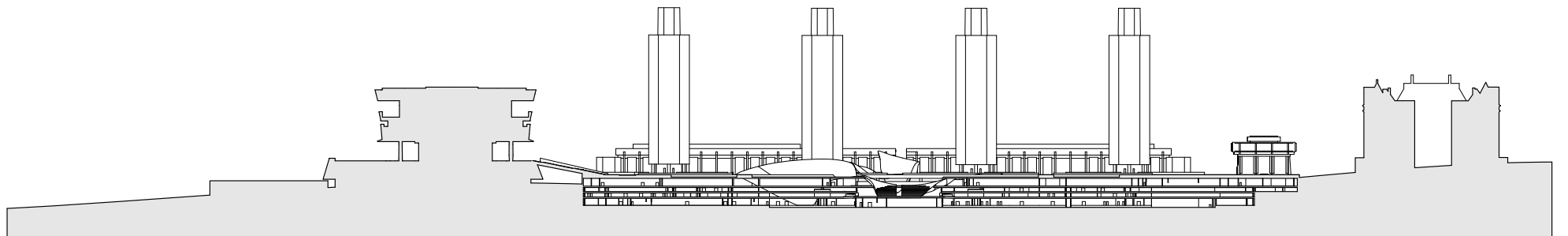
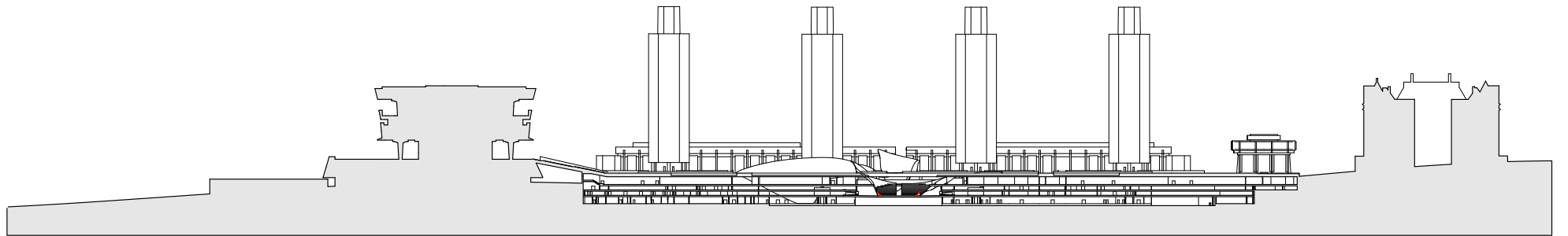
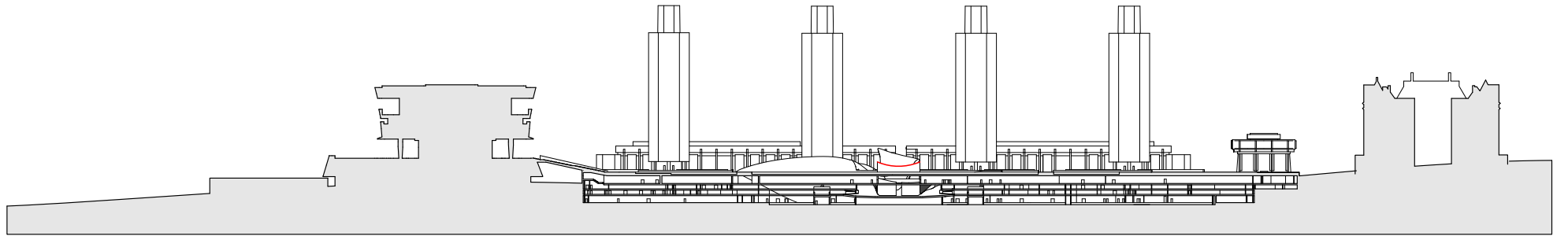
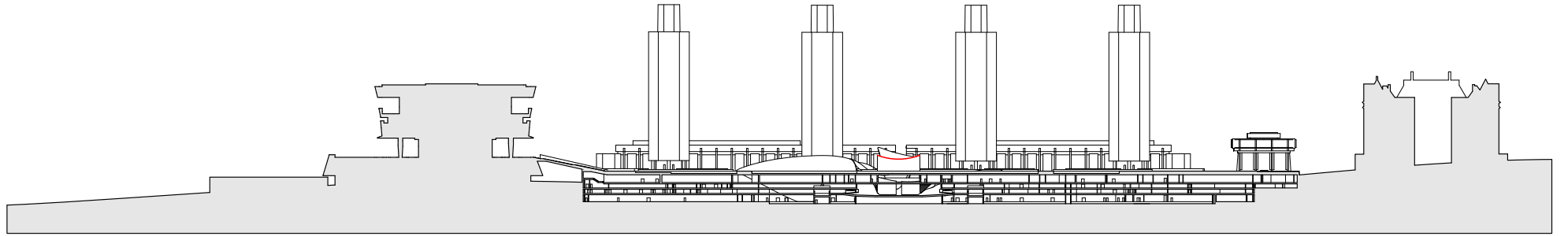
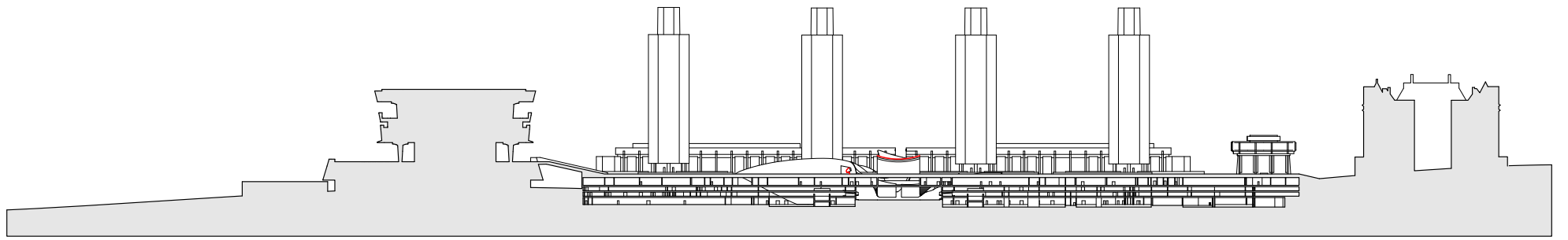
Cross Section

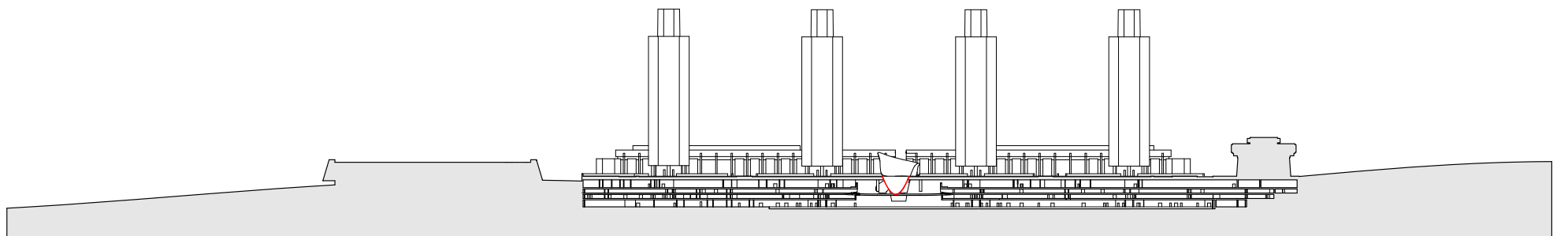
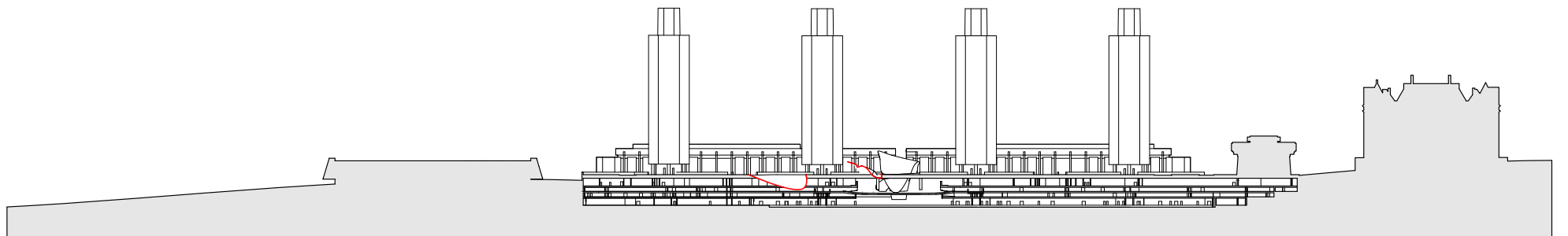
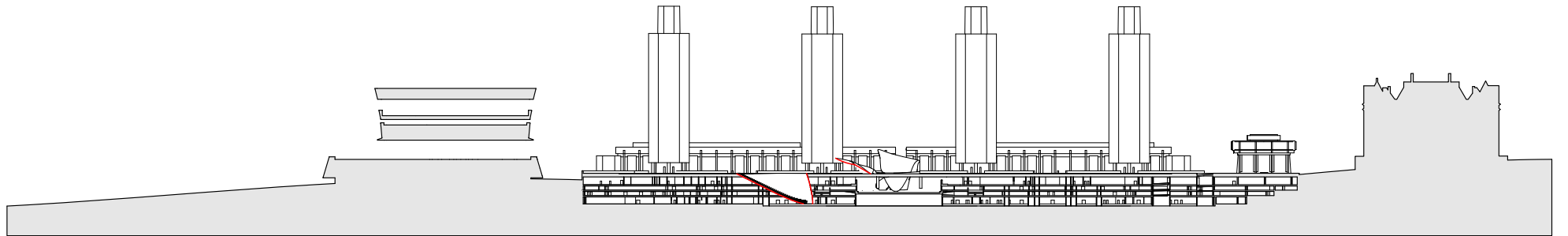
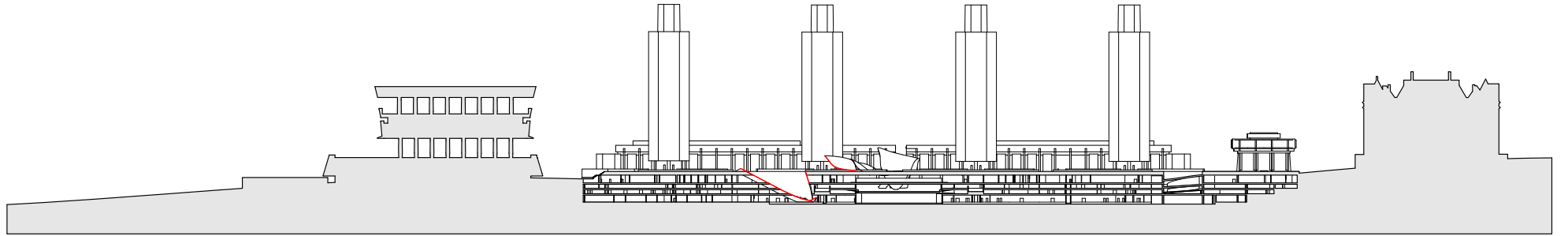
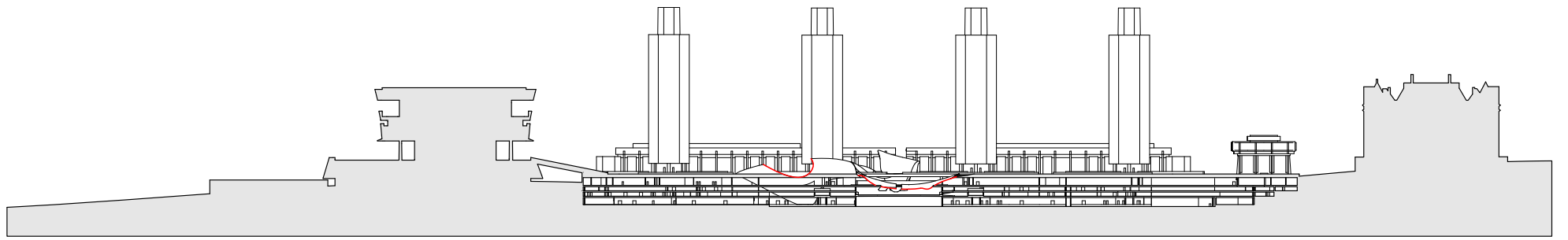


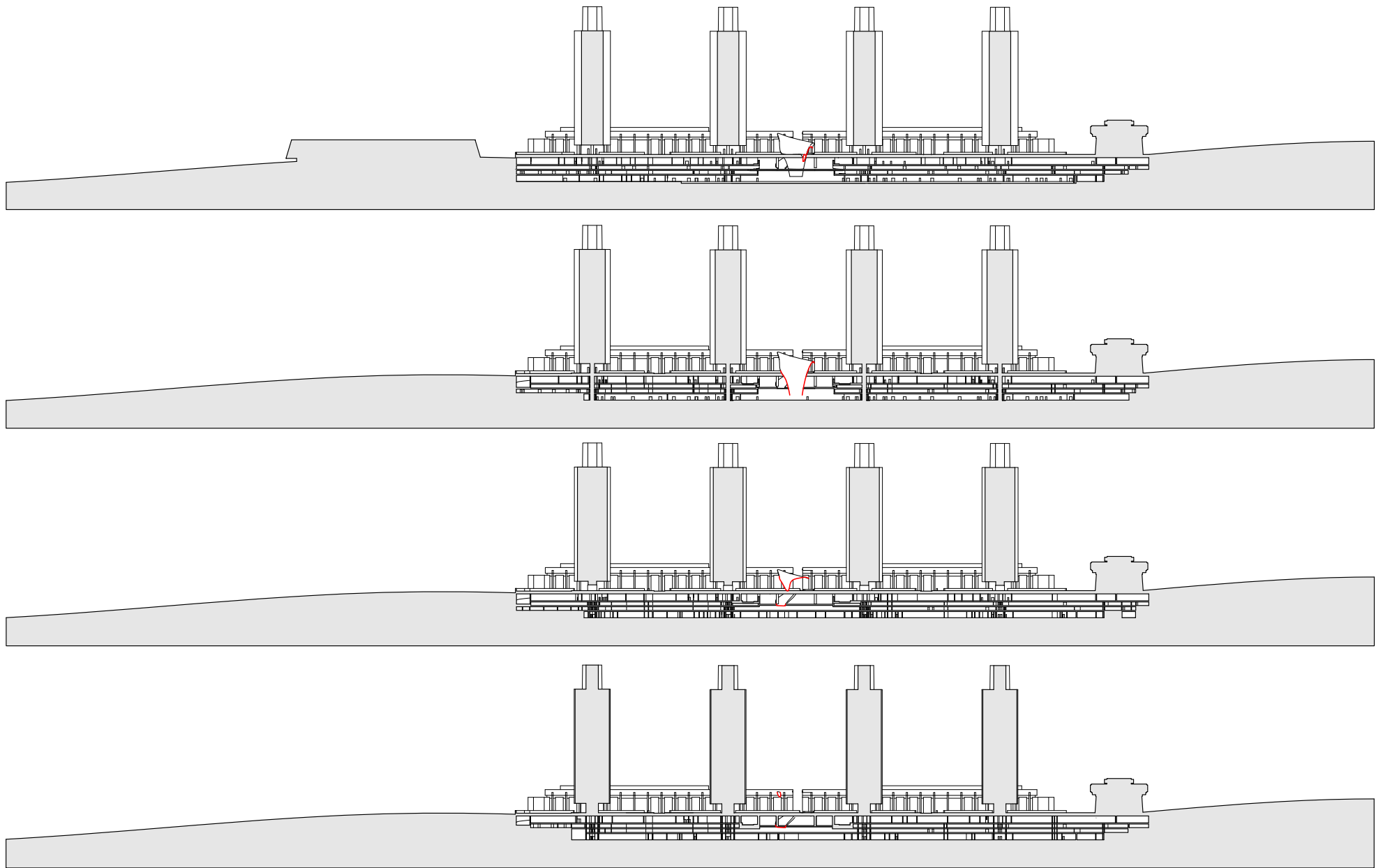




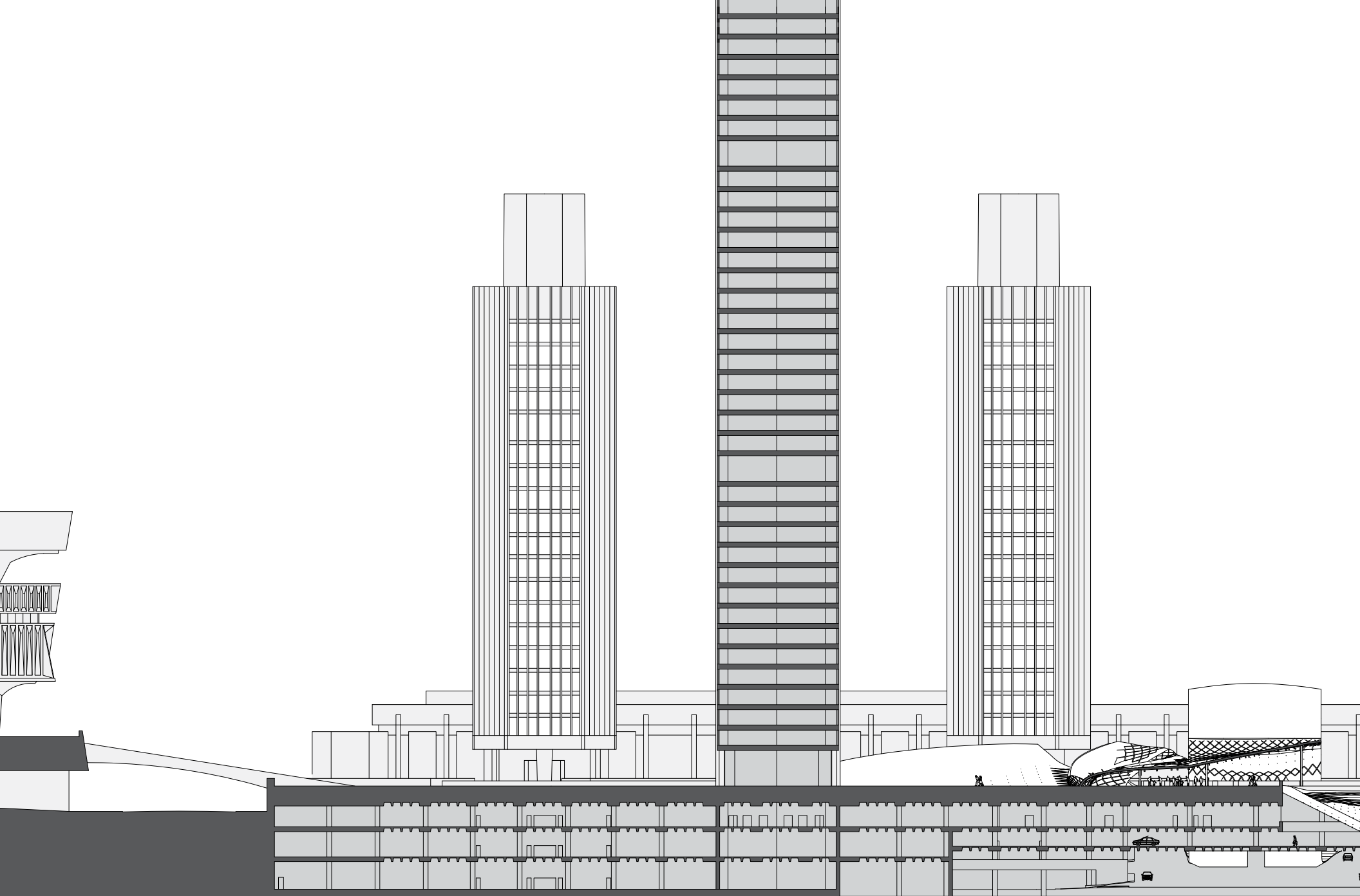




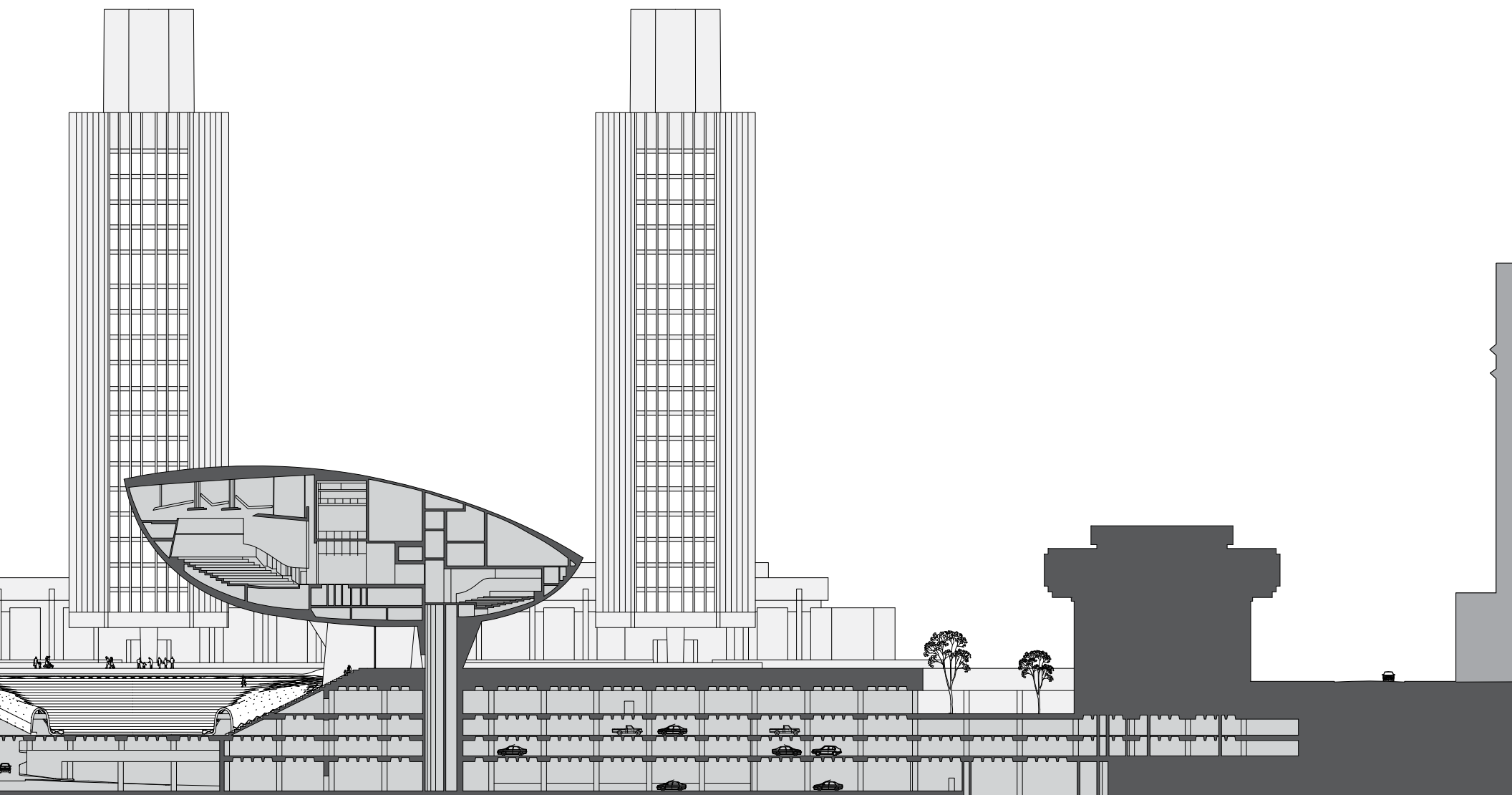




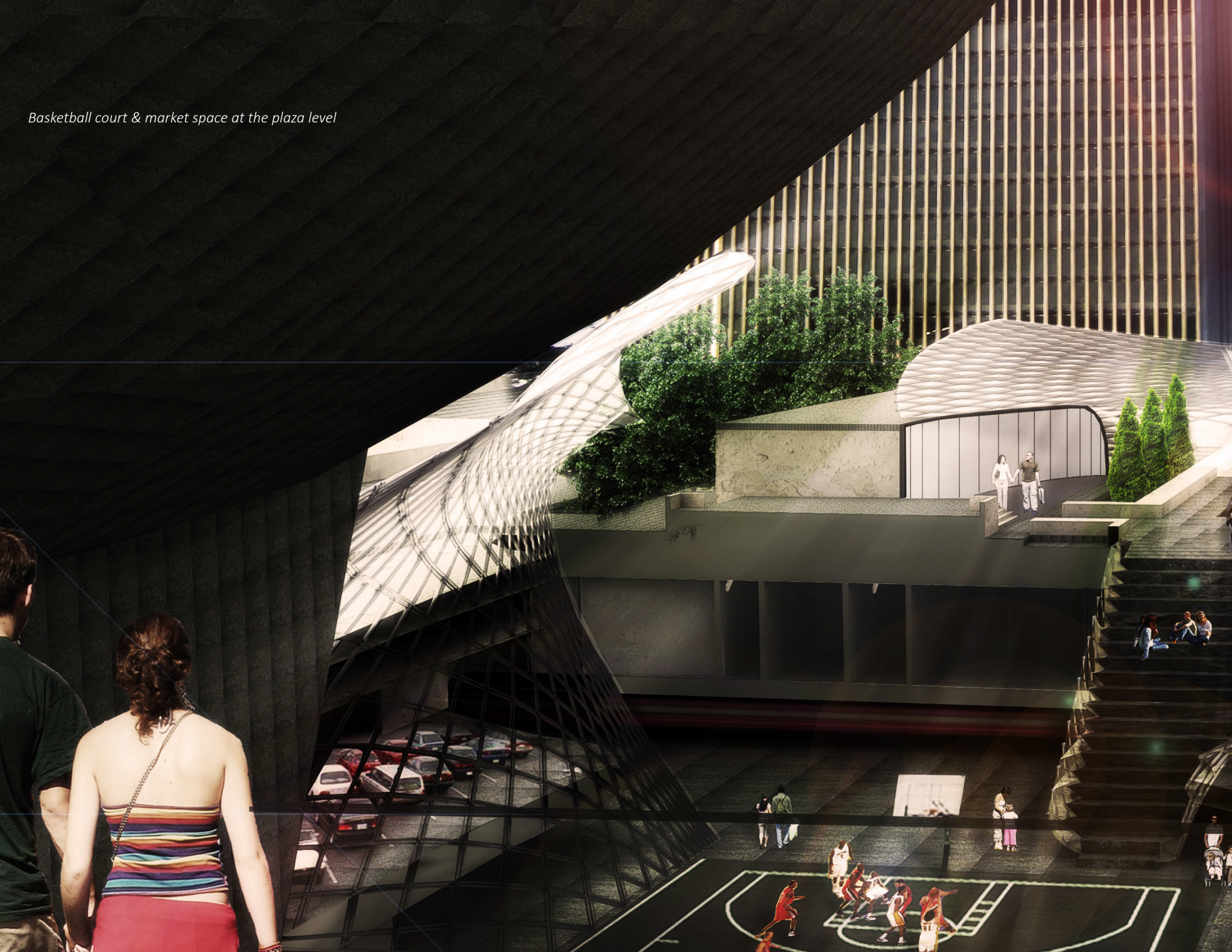
Series of Longitudinal Sections

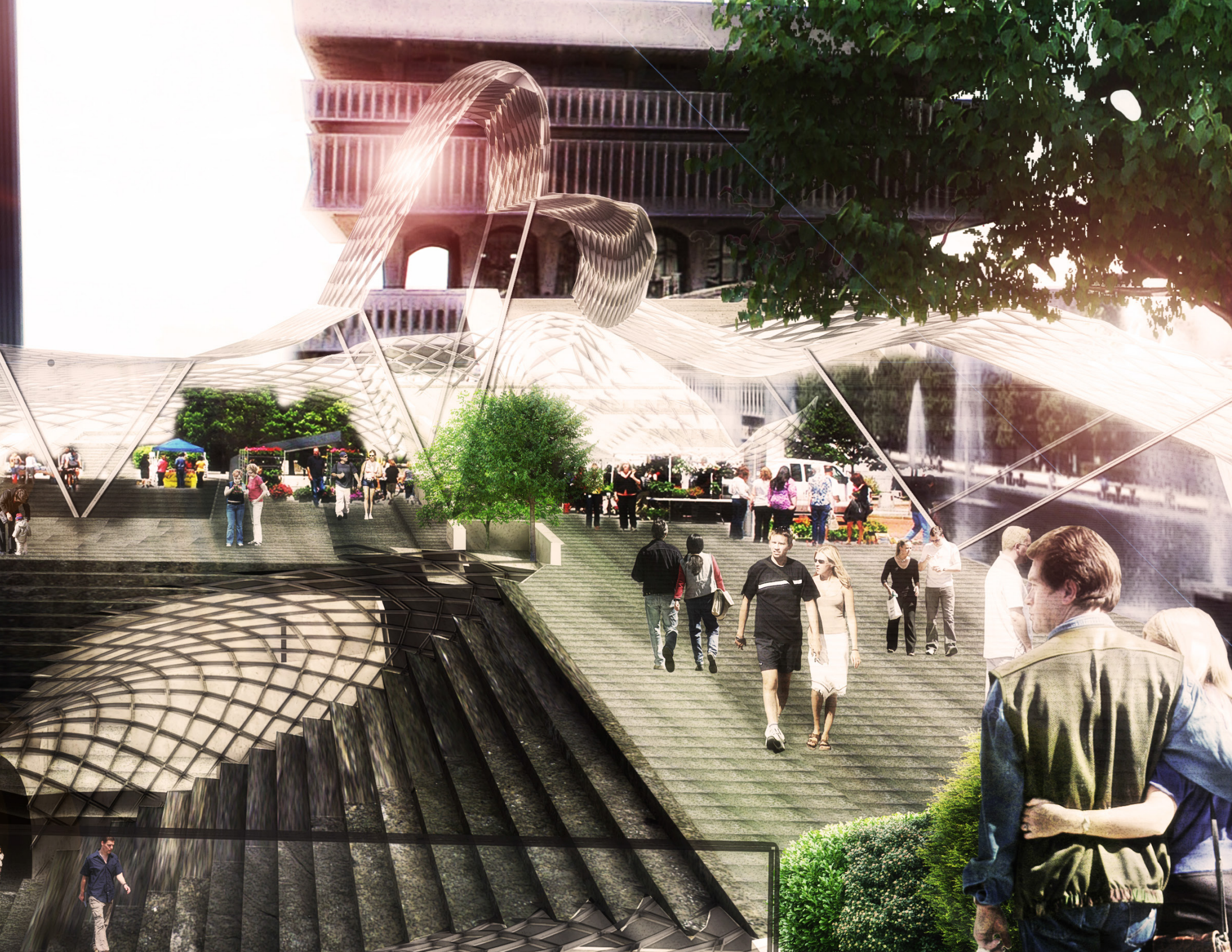


Longitudinal Section



Basketball court & market space at the plaza level

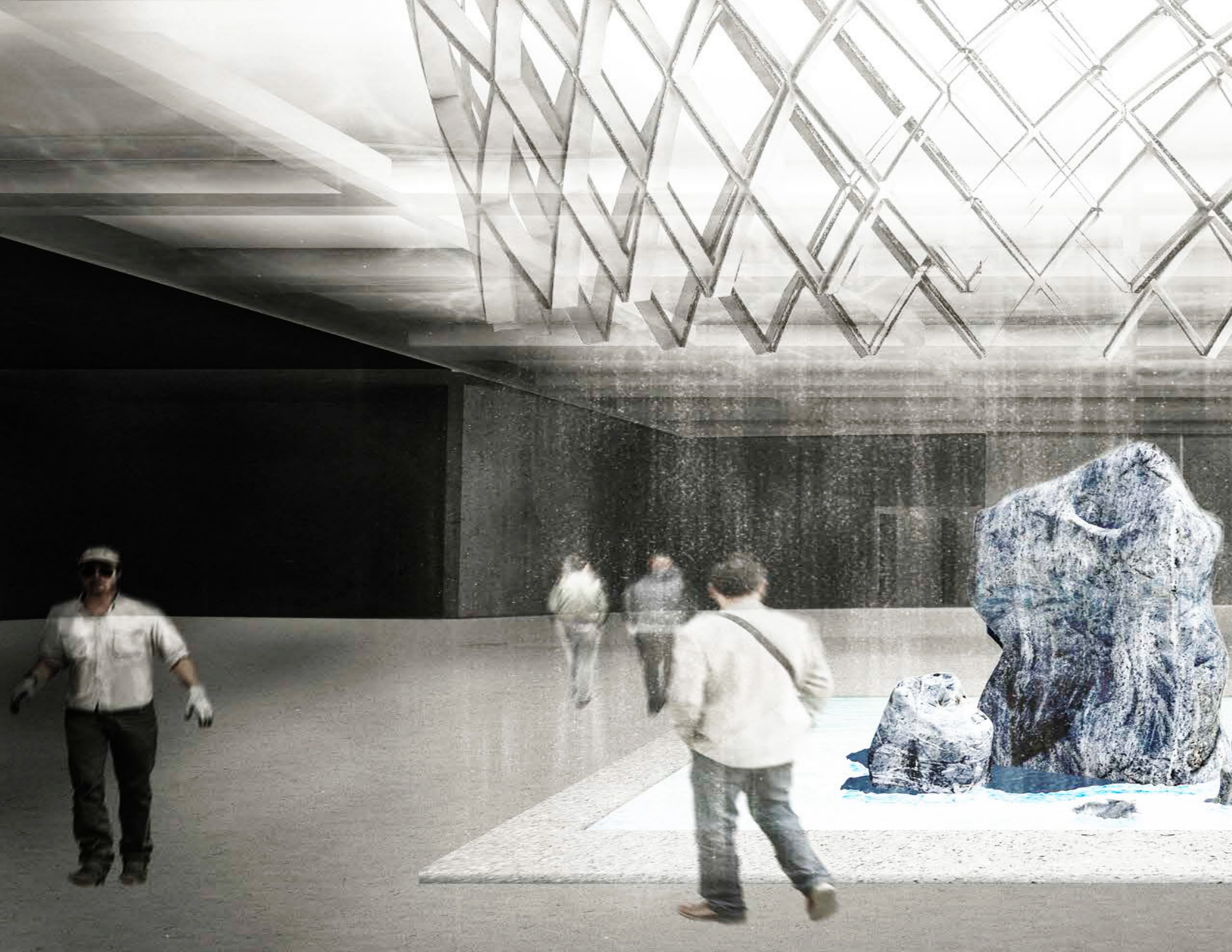






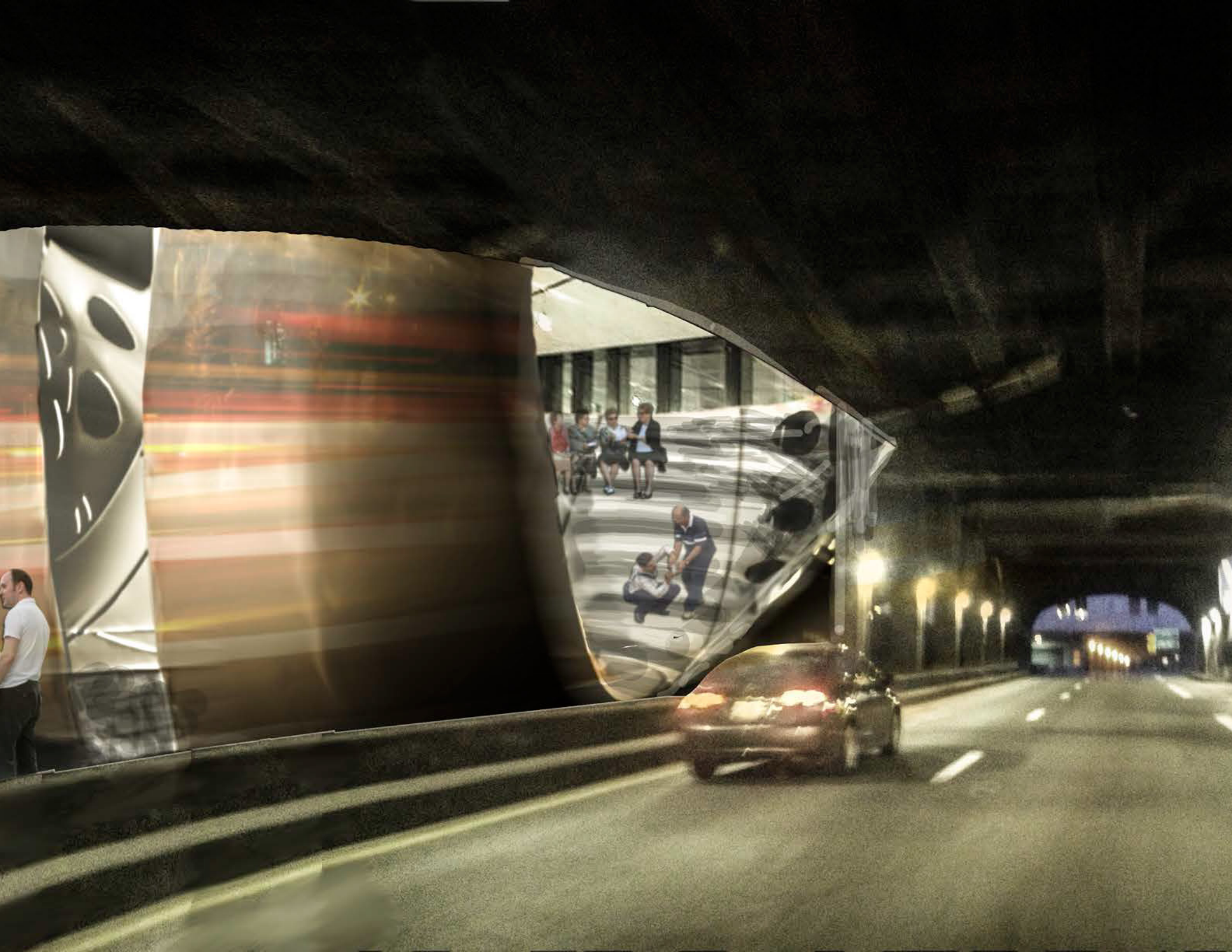


Concourse level





Meditation Garden within the parking



SPECIAL THANKS *(in no particular order):*

Elisabeth Bakker-Johnson & New York State Office of General Services (OSG):
Providing existing construction documents of the Empire State Plaza and a detail tour of the site.

Joe Wood: Model making; renderings

Hamza Hasan: Rendering; animations

Ikhlas Ahmed: Processing code development; data collection

Anika Ejaz: Site photographs; data Collection

Rene Duchesne: Model making; 3D print assistance

Tao Shuxiao: Model making; 3D print assistance

Lionel Camacho: Model making assistance

Jason So: Auto CAD Production assistance

Ran Yue: Model making; material purchases

Vicki Lee: Revit production assistance

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An overview of various works by Edgerton.

Eisenman, Peter. Inside Out: Selected Writings. London: Yale University Press, 2004.

The book contains a collection of essays by Peter Eisenman. There are several essays on form-form problem and basic formal understanding.

Eisenman, Peter. Ten Canonical Buildings: 1950-2000. Rizzoli, 2008.

Peter Eisenman goes through ten projects and explains their formal qualities. It contains good diagramming techniques.

EMBT: Enric Miralles, Benedetta Tagliabue: work in progress, (Barcelona: Actar, 2004).

"Four Sport Scenarios / Giancarlo Mazzanti + Felipe Mesa (Plan:b)" 09 Jun 2011. ArchDaily. Accessed 28 Nov 2012. <<http://www.archdaily.com/141675>>

Frampton, Kenneth. Studies in Tectonic Culture: The Poetics of Construction in Nineteenth and Twentieth Century Architecture. Cambridge: MIT Press, 1995.

The book explains symbolism in architecture with a focus on modern architecture of 19th and 20th century.

Godard, Jean-Luc. "A bout de souffle (Breathless)." Recorded 1960. Fox Lorber Films . 2001. DVD

Guggenheim, "Collection Online Gordon Matta-Clark." Accessed November 29, 2012. <http://www.guggenheim.org/new-york/collections/collection-online/>.

Hamlin, Talbot. Forms and Functions of Twentieth-Century Architecture. New York, NY: Columbia University Press, 1952.

Good for an overview of form-function problem.

"Halicarnassus on the Hudson: The Gov. Nelson A. Rockefeller Empire State Plaza, Albany, NY." Progressive Architecture. v.60.n.5 (1979): 106-109. Print.

Hardy, Steve. Time-Saver Details for Roof Design. New York, NY: McGraw-Hill, 1998.

The book goes through details of various roof connections. This will be important in the development phase of my project.

Kassler, Elizabeth B. "Rain on the roof: Water and Architecture, part 2." Architectural Record. (1958): 197-204.

Sustainability is a major part of my argument of multiplicity, this article will help me with water collection. Pragmatic and symbolic implications of the rain.

Moussavi, Farshid. The Function of Form. New York: Harvard School of Design. Actar, 2009.

The book goes through several projects and explains the problems of dual thinking (top-down system v. bottom up system) and proposes an alternative condition _ transverse system.

Morgan, Mareglia. ““Breathless” and Godard’s Jump Cuts.” Wordpress (blog), 06/02, 2010. <http://morganmareglia.com/2010/06/02/breathless-and-godards-jump-cuts/> (accessed October 30, 2012).

Moussavi, Farshid, and Alejandro Zaera-Polo. The Yokohama Project: Foreign Office Architects. Barcelona, Spain: Actar, 2002.

Roth, Manuela. Roof Architecture Design. Braun Publishing AG, 2012.

The book goes through several projects with a focus on roof conditions. Basically it is a picture book for quick reference.

Rowe, Colin. “The mathematics of the ideal villa : Palladio and Le Corbusier compared.” Architectural Review. 101. (1947): 101-104.

Rowe compares Palladio and Le Corbusier’s projects in formal terms. This article was very helpful for me in understanding basic formal issues.

Tang, Runsheng. “Thermal Behavior of Buildings with Curved Roofs as Compared with Flat Roofs.” Solar Energy 74.4 (2003): 273-86. Print.

Alongside formal issues technical matters also hold importance for my argument. This article will help me understand some of the technical issues behind curved roofs.

Winslow, Jon. “Hall of Shame, Empire State Plaza.” pps.org. Project for Public Spaces, 23 April 2003. Web. 16 Dec 2011. http://www.pps.org/great_public_spaces/one?public_place_id=760.

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